Short-Term Growth Management Strategy

Residential Information Update 2001 - 2005

THE CITY OF CALGARY
LAND USE AND MOBILITY
PLANNING AND TRANSPORTATION POLICY

City of Calgary

Short-Term Growth Management Strategy

Residential Information Update 2001 - 2005

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Short-Term Growth Management Strategy
Information Update 2001 - 2005

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Foreword

The land development and house-building industries attempt to be as responsive as possible to changes in the marketplace. The amount of housing constructed, the location of development activity and the types of housing at any point in time will vary with changing rates of population growth, consumer preferences, interest rates, house prices, expectations for the future and competition in the marketplace.

As a result, the transition of "raw" land (i.e., vacant or in agricultural use) to fully-serviced, subdivided, "ready-to-build-on" lots involves a good deal of uncertainty. **The amount of development in any given year is not certain, nor is its distribution among various builders, developers and communities.**

Within this changing environment, the City is called upon to provide utilities and transportation services to enable the "bringing on-stream" of new lands for development. The timing of expenditures for sewers, water and other utilities must occur prior to housing construction. Some transportation facilities may be needed to provide initial access to new development — other facilities may be provided later, as areas develop. The City must also plan for and provide a wide range of other municipal facilities and services to new communities as they grow.

The challenge facing the City then, is to be prudent in avoiding the premature extension of costly utilities and services while making every effort to support a competitive, efficient land development process. This ongoing "balancing" occurs in several forums at the same time (e.g., planning and subdivision approvals, budgeting processes, utility construction scheduling). To assist this balancing process, a shared view of the future is necessary.

This report is designed to provide an accurate description of recent suburban residential development activity in Calgary and to forecast activity for the 2001–2005 period. **The report does not contain policy recommendations or explicit budget priorities** — its contribution lies in providing a solid, comprehensive information base to support planning, development and budgeting decisions.

1

Executive Summary and Conclusions

A key purpose of this report is to examine the expected fit between residential land demand and supply over the coming five year period. **The intent is to ensure that there exists a sufficient supply of readily developable land, in a variety of locations, to facilitate competitive land and housing markets, while avoiding premature municipal investment in utilities and services.** It is recognized that supply and demand conditions are in a constant state of flux and that it is important to monitor changes on an ongoing basis and to review circumstances annually.

On the basis of the analysis presented in this report, the Growth Management Technical Committee wishes to put forward the following conclusions:

- Over the next five years, Calgary's population is expected to increase by an average of approximately 17,300 people per year, for a total increase of approximately 86,560 people by the year 2005. This is based upon The Calgary Economic Outlook Report 2000 through 2005.

- Demand for new single family/duplex housing is expected to average at 5,720 units per year, resulting in an increase of approximately 28,600 new units between 2001 and 2005.

- Demand for new multi-family housing (apartment and townhouse) is expected to be about 8,100 units total for the 2001 and 2005 period. Of this, approximately 45% (3,645 units) are estimated to be built in the developing suburban communities.

- The demand for new housing in suburban areas will likely require approximately 4,770 acres of residential land over the next five years, or approximately 900 - 1,000 acres per year.

- The likely distribution of suburban growth over the next five years is shown on Map 8 of Appendix I.

- The supply of residential land with "Utility Capacity in Place" presently exists (i.e., with minimal utility servicing cost to The City), is sufficient to satisfy expected demand on a **city-wide** basis through the five year

forecast period. **However, serviced land shortages may occur in particular sectors within the next five years unless new service extensions are undertaken.** For example, shortages of serviced land are forecast within the North sector. Current serviced land capacities should be adequate over the next five years in all other sectors with the possible exception of the South, until transportation issues are resolved.

- On the basis of the forecasts contained in this report, and assuming that a supply of land with "Utility Capacity in Place" is maintained in each sector, The City should consider undertaking or facilitating utility extensions over the next five years in the sectors shown below.

Sector	Probable Year in Which Utility Extensions Will be Required	Utility Extensions Required to Service Areas with Some Capacity in Place (Yellow Areas)
North	2001-2002	sanitary and storm
Northeast	---	---
East	---	---
Southeast	2001	water
South	after 2004	sanitary and water
West	2001-2003	storm and water
Northwest	2001-2003	water

This information will be considered in developing The City's 2001–2005 capital budget programs, Calgary GRAMP (Growth Area Management Plan), and the 10 Year Capital Spending Update.

- In terms of transportation requirements, the existing transportation infrastructure with the identified upgrading and new links (refer to Sections 9 and 10) has the capacity to support the initial development of most areas. However, the new subdivisions will impact the adjoining transportation network. It should be noted that many intersections throughout The City are already operating at capacity and failing during peak periods (refer to Map 5, Appendix I). These new developments, compound with the overall growth in The City, will further degrade the level of service of the transportation system unless additional expenditures are made beyond those in the City's current capital budget envelope. Alternatively, measures implemented to increase the current modal split in favor of modes other than auto could lesson the demand on the transportation road network, especially during the peak travel periods.

- The new funding structure announced by the Province last year will assist in providing road capacity to accommodate new development. City Council has approved a comprehensive Transportation Infrastructure Plan (TIIP) to meet the city's mobility needs to the year 2007. The TIIP includes upgrading and extensions to the roadway network, expansion of the existing LRT system, purchase of new buses and light rail vehicles, and

maintenance of existing infrastructure. A major source of funding for TIIP is the fuel tax program, established by the Province, which generates $85 million per year. The Transportation Infrastructure Investment Plan will provide $1.168 billion in funding for road and transportation projects between 2001-2007.

- The City should also continue to anticipate requests from individual developers to extend services to new areas. *The Calgary Plan* indicates that actual expenditure decisions related to the construction of municipal infrastructure should be evaluated through The City's Short Term Growth Management decision making process (Calgary Plan, 2-2.2.2.1H). These requests can be evaluated on their own merits and brought forward to Council for consideration.

  In responding to these requests, Council will find guidance in *The Calgary Plan*. It indicates that decisions on capital expenditures relating to the extension and/or upgrading of municipal water, storm, sanitary, and transportation systems, should be made through the normal budgeting process and after consideration has been given to:

  - the overall capital cost implications of the extensions, including the cost of other services The City provides;

  - The City's financial capability;

  - existing market conditions and anticipated demand as they relate to the proposed expenditure; and

  - the impact of these decisions on the provision of gas, electric, telephone and cable services (Calgary Plan, 2-2.2.2.1I).

2

Purpose of the Update

This report assesses Calgary's current residential land inventory as well as expected supply/demand conditions for the coming five year period (2001-2005). This information base is up-dated annually, in accordance with the Short-Term Growth Management Strategy, as approved by Council in February, 1985.

The report is intended to be used in two ways:

- to provide a common information base and set of forecasts (related to the next 5 years' growth) to support facilities planning and budgeting by civic departments; and

- to provide the Growth Management Steering Committee with a detailed and up-to-date analysis of suburban growth dynamics, providing a framework in which to evaluate the merits of individual requests for new service extensions in suburban areas.

Appendix I provides a detailed look at historical information and future estimates on residential growth in the form of tables, figures and maps.

Appendix II of this report also provides an overview of residential growth areas on a sector by sector basis.

The information base has been developed jointly by staff in several civic departments, coordinated through the Interdepartmental Growth Management Technical Committee. The Committee includes representatives of the following portfolios:

Land Use & Mobility
Utilities & Environmental Protection
Community Vitality & Protection
Corporate Services
Strategic Services

In addition, representatives from the Calgary Board of Education, Calgary Roman Catholic School Board and Calgary Police Services participate on the Technical Committee. In preparing this report, the Committee also consulted with representatives of the Urban Development Institute and the Calgary Region Home Builders' Association.

3

Economic Outlook: 2001 - 2005

Calgary's overall economic prospects for the coming five year period were reviewed by The City's Corporate Services in October of 2000. Some of the conclusions of this analysis are summarized below.

- Five year forecast for the Calgary economy:

	2001	2002	2003	2004	2005
Inflation Rate CMA (%)*	3.0	2.8	2.5	2.5	2.0
Population (000's)**	883	900	916	931	947
Net Migration **	15,600	11,200	9,100	9,000	10,800
Unemployment Rate CMA (%)**	4.9	4.8	4.7	4.6	4.5
Total Housing Starts**	8,600	7,600	7,000	6,700	6,800

* Annual % change, Calgary Census Metropolitan Area

** Annual level

- Although the Calgary economy is projected to continue growing, it is expected to do so at a slower rate than the past few years. Population growth is expected to be more moderate over the forecast period with a gain of 2.2% annually or approximately 17,000 to 18,000 persons per year. This is down from the 22,000 people, averaged per year, over the last five years. Migration to the city is also expected to decline, averaging around 11,000 people per year. This is also down from the previous five year period of 15,000 people per year.

  A reduction of the total housing activity has also been forecasted for the 2001 to 2005 period. Over the next five year period housing construction is expected to decline to approximately 7,340 units per year. Between 1996 and 2000 housing construction averaged 8,913 units per year.

- Multi family residential is also expected to slow and continue to decline throughout the forecast period and vacancy rates are expected to rise. Current vacancy rates for apartments are at 4.26%, slightly down from 1999 levels of 4.4%. Forecasts are for lower levels of apartment construction declining from estimates of 1,500 units in 2001 to 800 units by 2005.

4

Population Growth: 2001 - 2005

Calgary's population grew from 842,388 in April 1999 to 860,794 in April 2000, an increase of 18,406 people, or approximately 2.18%. In comparison, between 1998 and 1999 the population increased by 23,054 people.

Natural increase (births over deaths) accounted for an increase of about 7,044 people. Net migration decreased significantly for the third year in a row, to a level of 11,317 from 15,629 in 1999 and 21,735 in 1998 (refer to Figure 1).

City population forecasts produced in October, 2000 suggest that Calgary's population will increase by approximately 86,600 people by 2005 (Table 2).

Net migration over this period is forecast to range from 15,600 to 9,000 persons per year. This level of net migration will result in total population growth averaging 17,000 to 18,000 persons per year over the forecast period, or approximately 2.2% population growth per year. Figures 2 and 3 compare this forecasted level of growth with that experienced since 1987.

5

Housing Forecasts: 2001 - 2005

The demand for new housing is driven by both an increase in the number of households (e.g., an increasing population and/or changes in its composition) and changes in consumer housing needs/preferences (e.g., consumers choosing a newer or larger house). In turn, the make-up of the population creating a demand for housing at any point in time will affect the level of demand in particular sectors of the city, as some areas have traditionally served specific market segments.

The focus here is on the demand for new single family and duplex housing units. This development continues to account for most of the new housing activity in the city (Table 4). It generally occurs in new suburban areas, and drives the demand for most new subdivision. This new subdivision, in turn, creates a need to extend and upgrade municipal infrastructure. As a result, the manner in which housing demand is distributed among the various sectors of the city affects the need for and timing of substantial expenditures by The City to service new growth areas.

The anticipated level of demand for new single family/duplex housing is provided in Table 2. In 1999, there were 5,954 single family/duplex housing starts within the city, compared to 6,036 starts in 2000 (Table 4). **It is expected that the demand for new single family/duplex units will remain relatively consistent over the next five years starting with around 6,200 units in 2001, followed by an average of 5,600 units per year to 2005. This will result in an increase of approximately 28,600 new units (city-wide) between 2001 and 2005.** Figure 4 places this forecasted demand in the context of additions to the single family/duplex housing stock since 1987. Table 4 details housing construction activity over the past five years.

While most housing growth is occurring in new suburban areas, a small proportion (8% over the last five years, see Table 13) of new single family/ duplex starts are located in existing, developed neighbourhoods. This occurs through single family infill/redevelopment in older inner-city communities, as well as construction on vacant lands remaining in various locations throughout the city (the distribution of 2000 single family building permit applications is illustrated in Map 3). This percentage is monitored yearly by reviewing the previous five years history of where new units are located and used to assign the proportion of the new growth to the

developing communities i.e., 92% of expected new home construction to go to the new communities (see Table 13).

For the purposes of this report focus is given to the developing communities which helps determine the forecast component (Table 13 and Map 8). Each year's analysis determines the developing communites (Map 7) and the percentage of the forecasted growth to be allocated to these areas.

Forecasts combine single family and two family (duplex and semi-detached) housing units as their land needs and servicing requirements are generally similar.

With the exception of Table 5, references to multi-family lots/units throughout the report refer to a combination of townhouses and apartments. In part, Table 5 helps to show market share distributions of multi-family housing, particularly between developing communities in the suburbs and the remainder of the city. The market share is discussed in more detail in Section 7.

6

Suburban Residential Land Requirements: 2001 - 2005

The demand for residential land in the short-term is calculated on the basis of **an average density of 6 units per gross residential acre.** This reflects the average density of outline plans submitted in 1997 to 2000 for suburban communities developing in Calgary. Densities proposed and achieved will continue to be closely monitored so that estimated short-term land requirements can reflect current market conditions to the greatest extent possible.

Average densities in developing communities have been increasing slightly in recent years. It is expected that demographic and market changes will lead to a gradual increase in the proportions of multi-family units and smaller houses/lots being developed. This is already occurring in some communities and is consistent with policies contained within the *Calgary Plan,* encouraging innovative approaches in the design and development of new communities. This will prompt an increase in overall densities, in the variety of housing types, and in the capability for new housing to be integrated beyond the initial buildout of a community *(Calgary Plan 2-2.2.2B).* The Calgary Plan endeavours to ensure that new communities will work, over time, to achieve a target overall density of 6 - 8 units per gross residential acre *(Calgary Plan 2-2.2.2C).* However, it is <u>not</u> expected that these changes will significantly affect land absorption rates in the immediate future because there is an existing inventory of serviceable land with policy and land use approval already in place. It will take time for new policy directions to be reflected in the marketplace.

The density of individual communities varies, depending on the mix of housing types (i.e., the proportion of single family/duplex and multi-family units), single family/duplex lot sizes, and the extent of other land uses and amenities within the community, (e.g., local commercial sites, school sites, open spaces and transportation facilities). However, these variations are site-specific and, in terms of their impact on overall land requirements, should not affect the expected timing of utility extensions at the sector level.

Table 2 provides a breakdown of the annual land requirements associated with forecasted housing demand and the assumed 6 units per acre density through to the year 2005. **Approximately 4,770 gross residential acres of land will be required in suburban locations between 2001 and 2005 to support single family/duplex unit development — ranging between approximately 900 and 1,000 acres per year.** Sections 7 and 9 of this report describe the manner in which the demand for serviced land has been distributed in the past. As well, they forecast the expected distribution of future demand. Tables 13 and 14 provide estimates of the distribution of housing construction and land absorption, by sector, through the five year forecast period.

Residential density is calculated using the following template.

Residential Density: **"Sample Template"**

			% of Total
Total area of the Community (gross area):		100.00 Acres	100%
Less "Non-Developable" Lands:			
Environmental Reserve	1.00		1%
Railways	1.00		1%
Expressways, TUC, ROW's	1.00		1%
Irrigation Canal / River	1.00		1%
Other	1.00		1%
Total "non-developable" lands:	5.00	5.00	5%
Developable Area (gross developable area):		95.00	95%
Less "Non-Residential" Regional Uses:			
Senior High School Sites	1.00		1%
Major Commercial Centres > 7acres	1.00		1%
Golf Course	1.00		1%
Regional Open Space	1.00		1%
Driving Range	1.00		1%
Lakes	1.00		1%
Major institutional site(s)	1.00		1%
Other Regional Uses	1.00		1%
Total "Non-Residential" Regional Uses:	8.00	8.00	8%
Gross Residential Area (gross residential area):		87.00	87%
Which includes:			
Single Family Residential	50.00		50%
Vacant Residential	10.00	(Outline and Tentative Plans and undeveloped residential)	10%
Multi-Family Residential	10.00		10%
Local Commercial	1.00		1%
Elementary & Jr. High Schools & Sites	1.00		1%
Local Open Space	1.00		1%
Wet / Dry Ponds & Public Utility Lots	1.00		1%
Church Sites	1.00		1%
Daycare Centres/Community Halls	1.00		1%
Small Indoor Recreation Site(s)	1.00		1%
Small Site Fire and Police Stations	1.00		1%
Local Roads & Lanes	9.00		9%
Gross Residential Area:	87.00		87%

Achieved Density in 2000:		**Units in 2000: /**	**GRA less Vacant Residential**
Excluding Undeveloped Vacant Sites		Civic Census: 539 /	77.00 (existing built-up,less vacant residential
		=	7.00 *Units / Acre (upa)*

Potential Longer-Term Density:			**Units**	**Acres**
To build-out:	Existing Units		539	77.00
	Capacity of Vacant residential sites (units)		114	10.00
		Total Units	653 /	87.00
		=		7.50 *Units / Acre (upa)*

7

Indicators of Market Share, by Sector

Building Permit Statistics

Calgary's Building Permit figures indicate the increase in dwelling units in developing communities and provide one indicator of past market performance. The distribution of this increase in units over the last five years, by sector, is provided in the upper portion of Table 5. The delineation of sectors is illustrated on Map 1.

With respect to single family/duplex new building permits, the Northwest, North and South sectors have been the city's strongest growth areas over the past five years. In combination, these three sectors have accounted for roughly 62% of the new suburban single family/duplex market since 1996. The north half of the city (North, Northeast, and Northwest) has captured 57% of the housing market in the last five years where the south half (South and Southeast) of Calgary has captured 31%. The West with 9% and the East at 3%. In recent years some of the sectors have seen a shift in market shares as new areas have opened up while others such as the East, have virtually no supply remaining. The West sector has been increasing since 1998 with the development of new communities.

The share of total suburban single family/duplex growth achieved in each sector, from 1996 to 2000, is illustrated in Figure 6. The distribution of market share for 2000 is shown in Figure 7.

For multi-family (including apartments and row housing), the West, Northwest and South sectors have shown the highest concentration of development once again, together they accounted for roughly 75% of the new suburban multi-family market since 1996. The West at 28%, the Northwest at 26% and the South at 21% continue to accommodate significant proportions of this development. However, it is important to note that multi-family market shares tend to be less predictable with regard to sector locations than single family.

Building Permit Applications

Market share in the short-term is probably best reflected in the distribution of recent approved building permit applications for new units.

New for this year is information comparing the developing communites by sector versus the complete city sector. The communities that are considered to be developing are shown in Map 7.

Table 7 and Figure 8 provide the distribution of single family/duplex building permit applications in 2000 by each sector. The distribution of permit applications for 2000, for the developing communities within each sector, are shown in Table 6 and Figure 9. The location of 2000 single family building permit activity is also illustrated on Map 3.

The lower half of Table 5 shows the market share distribution of building permits for multi-family housing units between the suburbs and the remainder of the city from 1996 - 2000. Comparisons are shown between development activity in the suburban sectors and the remaining Central sector, as well as between developing communities (i.e. those suburban communities currently experiencing construction of new units) and the remainder of the city.

When multi-family housing is defined as including duplexes, apartments and row housing, an average of 66% of new multi-family development occurrred in the **suburban sectors**: the remaining 34% occurred in the Central sector. Comparatively, an average concentration of only 46% of this same mix of unit types was located in **developing communities**, with the other 54% being developed in the remainder of the city.

The final comparison in Table 5 removes duplexes from the multi-family unit mix. However, the distribution between **developing communities** and the remainder of the city stays relatively constant to last year's 47%; an average of 45% of multi-family development occurred in developing communities.

2000 Developer Survey

Each year The City of Calgary Urban Development Division, surveys the development industry to determine areas where individual developers anticipate undertaking development. The results of the most recent survey are contained in Table 8. The lands referred to in Table 8 are located, generally, on Map 2.

It is important to note that this distribution of market expectations reflects the unique circumstances in each sector with respect to the availability of serviced land, and not necessarily the expectation of immediate housing construction. The timing and scale of servicing and subdivision expectations often relate to a slightly longer time horizon and may be more directly affected by marketing strategies of individual developers.

Housing Starts

In 2000, there was an estimated 9,648 housing starts in Calgary, of which 5,628 (58%) were for single family units. An additional 408 (4%) starts were for duplex units (Table 4).

As indicated in Table 4 and Figure 20, single family/duplex units continue to dominate the new housing market on a city-wide basis. The multi-family share of new housing starts represented 37% of total starts in 2000, with construction starting on 3,612 new townhouse and apartment units. Multi-family growth has been steady, since 1997 as shown in Figure 20.

Residential construction is expected to remain relatively stable when compared to the last few years. However, with forecasted lower levels of net migration occuring after 2002, the construction activity is expected to drop slightly from recent levels for both single family and multi-family, as shown by Table 2.

Subdivision Activity - Outline and Tentative Plan Applications

Figure 13 illustrates the number of acres submitted for outline plan approval annually since 1988. While volumes declined sharply to 758 acres in 1995, they moved to 1,923 acres in 1996 and to 2,632 acres in 1997. 1998 and 1999 levels were around 1,897 and 1,836 acres respectively. The 2000 figure has 4,344 acres submitted. This is the largest number of acres approved since 1981 (4,482 acres). This equates to 6.8 square miles of approved outline plans; almost 2.5 times the levels of the past few years.

The same increase has not been noticed in applications for tentative plans. Rather, the levels have been fairly close in the last two years. Tentative plans typically come on stream much closer to the actual building stage than do outline plans and are not comparable.

Figure 14 shows the number of lots submitted annually for tentative plan approval since 1988. Volumes fell sharply in 1995, to 3,734 lots, the lowest level since 1988, but this was followed by a similarly sharp increase in 1996 (6,204 lots) and a second sharp increase in 1997 (9,209 lots). In 1998, a fourteen year high of 10,049 lots were applied for. In 1999, 7,307 lots (a steep decrease) were submitted for tentative plan approval. Similar to 1999, the year 2000 levels brought in 7,436 lots.

8

Land Available for Residential Development, by Sector

Land considered available, as of April 2000, for residential development in the suburban market includes three types of land;

1) Vacant lots in new suburban communities.
2) Land in the process of being subdivided.
3) Those remaining lands which are, as yet, unsubdivided, but which are identified for future residential use.

The status of this supply changes constantly as approved lots are registered and serviced, as construction begins on vacant lots, and as plans are developed or amended. The intent here is to provide an accurate assessment of overall residential land supply, reflecting conditions as of April 2000.

Current Single Family / Duplex Lot Inventory

A detailed estimate was made of the current inventory of single family and duplex lots, both vacant and under construction, in suburban areas in April 2000. Approximately **12,352 vacant lots** existed at that time, including those which were serviced and available to builders, as well as lots recently approved through tentative plans of subdivision. This inventory was higher than the April 1999 inventory, which totalled approximately 10,606 vacant single family/duplex lots. The supply can accommodate roughly two years of residential growth given current and expected demand.

The estimated suburban single family/duplex lot supply, by sector, is detailed in Table 10. The distribution of vacant lots is illustrated in Figure 15.

Vacant Residential Lot Inventory

Historically, data on the number of vacant residential lots has been available from The City's Electric System. Until December 1996, they compiled an annual survey of vacant fully serviced suburban residential lots **(with shallow utilities in place)**. This source has been replaced with information from the Calgary Chapter of the Urban Development Institute (U.D.I.).

Annually, since January 1997, they have compiled a survey of vacant suburban residential lots which may or may not have shallow utilities in place. In January 2001, there were approximately 7,735 serviced, vacant lots, as shown in Table 11 and Figure 16. The inventory over the last four years has been relatively stable between 7,700 and 8,200 lots.

Unsubdivided Residential Land Supply

The current unsubdivided suburban residential land supply is indicated, by sector, in Table 12. The distribution of that land supply is shown on Figure 17. **As of April 2000, there were an estimated 15,068 gross residential acres intended for residential and related uses. Given lot counts from approved outline and tentative plans for both single family/duplex and multi-family units, as well as an assumed density of 6 units per gross residential acre for currently unsubdivided areas, these lands could accommodate approximately 98,000 new residential units.** Map 6 shows the unsubdivided residential land supply for the entire city, while detailed maps of the residential land supply, by sector, are contained in Appendix II.

This inventory does **not** include large areas of land annexed to the city in 1989, or those areas for which future land use policy has not yet been developed. These excluded areas are shown in Appendix II (Grey areas). They will continue to be excluded from the residential land inventory until formal planning policies are in place and/or more extensive technical analysis is undertaken to determine the likely developable residential components.

The lands included in the inventory are classified according to the availability of water and sewer (storm and sanitary) services, as this infrastructure must be in place before development can proceed.

Areas classified as having "Utility Capacity in Place" indicate that major utility services have either been installed or will be provided by the developers without major City expenditures, although the land is currently neither subdivided nor developed with on-site services. The two remaining classes describe lands with **some**, but not all, utility capacity in place or lands having **no** capacity in place.

In Appendix II, lands within each sector are mapped according to servicing status. These servicing maps **do not** take into account the availability of downstream transportation capacity, which is discussed throughout the text, nor do they indicate the costs to construct the required services. **It cannot be assumed that areas having "some" capacity in place are necessarily less costly to service (including transportation infrastructure) than those having "no" capacity in place—their relative cost depends very much on the unique circumstances in each area. In**

light of this, the coding of these two categories should not be construed to imply the intended sequence of development. Generally, servicing costs and attractiveness to the market have been the main determinants of when individual areas are brought on-stream. More specific information about servicing thresholds/budgets/constraints/sequencing will be provided through the Growth Area Management plan (GRAMP) currently in preparation.

As noted above, transportation requirements may impose a further constraint on development, but the extent of constraint may vary from situation to situation. Although the required transportation facilities may be substantial in some situations, there is a greater degree of flexibility in the timing of the expenditures. Transportation facilities are not generally required in their final form until substantial development has occurred. Notwithstanding this, it must be emphasized that some of the areas discussed below, while having all or some utility capacity in place, may also have major transportation constraints which affect their developability in the 2001–2005 period (refer to Section 9).

It should also be noted that although The City may not be responsible for constructing major servicing projects in areas with utility capacity in place, it will still need to budget for "oversize" costs associated with specific transportation and utility improvements constructed by individual developers. "Oversize" costs are recovered from developers and in the case of transportation costs, they are recovered by means of major road assessments upon new developments.

Finally, it is noted that this servicing analysis **does not** take into account the related need for other public facilities (e.g., recreation facilities, libraries, fire stations) or services (e.g., transit, police, fire, EMS, social services) also required to support growth in a specific area. More specific information about facilities and services will be provided throught the Growth Area Management Plan (GRAMP).

Areas with "Utility Capacity in Place"

With the exception of the East sector, a supply of land exists in each sector which is immediately developable, with all major water and sewer (storm and sanitary) facilities in place. These areas are shown in "green" on the maps included in Appendices I and II.

These lands are not, as yet, subdivided, nor do they have local "on-site" services in place. There is, however, capacity in the utility "system" to accommodate their development without requiring significant City expenditures for major trunks, watermains, reservoirs, etc. In this sense, they are considered to have utility capacity in place. **Of these areas, those with specific transportation system constraints are identified in Section 9.**

These areas represent approximately 6,006 acres, of which 270 acres are projected for multi-family use. **In total, areas with utility capacity in place in 2000 could accommodate approximately 36,000 single family/duplex units and 5,700 multi-family units.** (See Table 12 and Figure 18.)

Although each of these areas, in isolation, could develop without major expenditures for water and sewer lines, **the cumulative effects of simultaneous development in all of these areas could result in a need for improvements in the facilities.** Additional capital projects (treatment plants, reservoirs, etc.) will be required to meet increases in city-wide service demands as the city grows. **Full development of many of these areas will also require major transportation improvements and provision of a variety of necessary public facilities and services.** It is intended that these cumulative requirements will be identified and monitored through the Growth Area Management Plan (GRAMP) process.

Areas Having "Some Utility Capacity in Place"

In the areas having "Some Utility Capacity in Place" (identified in "yellow" in Appendices I and II), **capacity exists in at least <u>one</u> major municipal utility (storm sewer, sanitary sewer or water).** In each instance, additional capital expenditures are required by The City before large-scale development can commence. **The areas designated as having "Some Utility Capacity in Place" total approximately 2,994 acres** (down from 4,830 in 1999) **and could accommodate approximately 19,000 units.**

The full development of many of these (yellow) areas, on a sector basis, will require major transportation expenditures.

Areas Having "No Utility Capacity In Place"

The third category of lands (shown in "red" in Appendices I and II) includes all of the remaining unsubdivided lands which are identified through Policy Reports, Area Structure Plans and Community Plans (either approved or in preparation), and are identified in *The Calgary Plan*, as having a future residential land use. **These lands represent approximately 6,100 acres in total** (up from 4,700 in 1999) **and could accommodate approximately 37,800 units.**

The full development of these areas will require major transportation improvements.

9

Probable Supply/Demand Conditions, By Sector

A key purpose of the Short-Term Growth Management Strategy is to examine, on an annual basis, the expected fit between residential land demand and supply over the coming five year period. **The intent is to identify whether a sufficient supply of readily developable land exists, in a variety of locations, to facilitate competitive land and housing markets.** The comparison of supply and demand is based upon a set of assumptions regarding the level of population growth, the character of housing demand and the expected distribution of that demand among the competing growth corridors. As the market changes, these assumptions can be expected to change as well.

Section 7 of this report provides a basis for estimating the expected market share of single family/duplex housing starts in the short-term, although **it is recognized that major shifts in activity can and do occur from time to time as a result of individual developers opening up or completing particular subdivisions.**

Table 13 provides estimates of the number and distribution of new single family/duplex starts, by sector and for the developing communities, over the 2001–2005 period. This distribution, by sector, is illustrated in Figure 19. Table 14 estimates the annual demand for residential land, in each sector, and relates these demand forecasts to the existing inventory of unsubdivided land with "utility capacity in place." Supplementary information related to the rate of development, land supply, and remaining housing and population capacity within the individual communities in each sector is contained in Appendix II. Since much of this document deals with the new developing growth areas, information specific to these areas is provided throughout this document. Table 13 estimates these needs for the developing communities as typically the majority of growth is in these areas.

Map 8 provides an overall view of the possible distribution of both housing growth (approximately 26,312 single family/duplex and 3,645 multi-family units) and population growth within developing areas over the next five years, based on the assumptions and forecasts outlined in this report.

It should be recognized that **this report does not address the downstream transportation impacts generated by suburban growth**. Many downstream intersections are currently at capacity and failing during peak periods. Map 5 in Appendix I shows locations of capacity problems at signalized intersections where one or more movements are at failure during one or both peak periods.

North

Existing Supply:

- The North sector has accounted for a 19% share of the new single family/ duplex market since 1996, with development occurring mainly in Country Hills, Coventry Hills, Harvest Hills, Hidden Valley, and Panorama Hills. As can be concluded from Table 5 and Figure 6, on average, the sector has added 1,250 single family/duplex units per year over the past five years. Figure 7 indicates that more recently, the sector accounted for 14% of the suburban single family/duplex market growth in 2000, adding 806 units through new building permit applications.

- As of April 2000, the North sector had an inventory of 1,497 vacant single family/duplex lots and 217 acres of unsubdivided land with utility capacity in place. This would accommodate an additional 1,204 single family/ duplex units.

Demand Assumptions:

- It is expected that the sector's market share will average 18% or approximately 900 to 1,000 houses per year over the next five years. The last three years have seen a decrease in the sector, dropping from a 20% market share on average over the last five years to 16% over the last two years. Limited availablility of serviced land supply has somewhat constrained growth the last few years. Servicing solutions proposed in the next few years should increase market shares to more historic levels pushing to around 16% in 2002 and 21% by 2005 (Table 13).

- The sector boundaries have been modified between the North and Northwest sectors this year to allow for the area of Symons Valley to be located entirely within the North sector.

- Typically, new communities generally build slowly in the first few years and this is expected with the Symons Valley area. Residential demand is expected to pick up around 2003 and beyond. As well, increased growth in the communities of Coventry Hills and Panorama Hills is expected as communities in the Northwest sector build out and some of that growth moves into the North sector. The Hamptons, Citadel, Arbour Ridge and Valley Ridge are expected to be built out within the 2002-2003 timeframe with some of the market shares going to the remaining Northwest communities of Rocky Ridge, Royal Oak and Tuscany.

Influencing Factors:

- Stoney Trail will be developed by the Province as a minimum two lane road between Country Hills Boulevard and Beddington Trail in 2004.
- Stoney Trail is planned for construction by the Province as a minimum two lane road between Beddington Trail and Deerfoot Trail in 2007.
- A bridge will be constructed over West Nose Creek in 2001 in coordination with the developer constructing a four lane road on Harvest Hills Boulevard.
- With the exception of the Deerfoot Trail/Country Hills Boulevard interchange, access to the area should remain relatively good, due to the 1999-2000 provision of upgraded road infrastructure such as widening of Country Hills Boulevard. The interchange at Deerfoot Trail and Country Hills Boulevard supports substantial traffic and has experienced significant delays. The Province is currently undertaking construction to improve the interchange and the completion date is December 2001. This includes twinning the existing bridge and two loop ramps
- The Province is undertaking the upgrade of the entire Deerfoot Trail, including the construction of the interchange at 96 Avenue and Deerfoot Trail that will be completed in 2001.
- Beddington Trail/Symons Valley Road will provide the primary road access to the Symons Valley community in the first few years of development

Northeast

Existing Supply:

- The Northeast sector has achieved an average single family/duplex market share of 11% since 1996 (Table 5 and Figure 6). On average, the sector has added 704 single family/duplex units per year over the last five years. In 2000, the Northeast accounted for 16% of the suburban single family/duplex market or 910 new units (Figure 7). This increase partially reflects a capacity of serviced land to the balance of the subdivided land in the sector. The good supply of serviced land has assisted in the increased market share from 10% in 1998, 13% in 1999 and a high of 16% in 2000. The Northeast sector also absorbed some of the market share from the building out of the East sector.
- As of April 2000, the Northeast sector had a total inventory of 1,187 vacant single family/duplex lots and 1,218 acres of land with utility capacity in place. The sector is able to accommodate 8,800 additional single family/ duplex units.
- Development is ongoing in Saddleridge, Martindale, and Taradale, while

the communities of Coral Springs and Montery Park are built-out.

Demand Assumptions:

- The sector has experienced increasing levels of growth, partly since the East sector is virtually built-out and much of the 3 - 4 percent growth from the East sector has moved into the Northeast. As well, slower than normal growth in the North sector in recent years may have shifted some demand into the Northeast.

- It is expected that the average growth over the next five years will be approximately 13%. This translates into approximately 700 new single family/duplex units per year. With no further competition from the East sector it is expected that the Northeast will continue to support about 13% of the market share to 2005 (Table 13).

Influencing Factors:

- Pressure on McKnight Boulevard will be eased with the completion of the new 96 Avenue NE connection from Deerfoot Trail to the Airport. Construction will be completed in the Fall of 2001.
- Construction of 36 Street NE from a two lane to a four lane road between McKnight Boulevard to 64 Avenue NE will be done in 2002 - 2003.
- McKnight Boulevard will be expanded (twinned from a two lane) to create a four lane road between 52 Street NE to 68 Street NE in 2003.
- The Northeast LRT will be extended two kilometres along 36 Avenue, from the Whitehorn station to the new proposed Prairie Winds station with construction in 2004 - 2006.

East

Existing Supply:

- The East sector has achieved an average single family/duplex market share of 3% since 1996 (Table 5 and Figure 6), with development occurring in Applewood Park and Erin Woods. Essentially the sector has built-out over the last year and there is no future planned residential land supply.

Demand Assumptions:

- It is expected that the sector will capture a 0% market share over the next five years.

Influencing Factors:

- Twinning of 68 Street East from a two lane to four lane road between Memorial Drive and 17 Avenue SE in 2004.

Southeast

Existing Supply:

- The Southeast sector has achieved an average 15% share of the suburban single family/duplex market since 1996 (Table 5 and Figure 6), or approximately 950 units per year. More recently, the sector accounted for 9% of the market in 2000, adding 531 new units through building permit applications. Since 1996 the share has dropped from 19% to 9%. This drop is primarily due to the build-out of McKenzie Lake and Douglasdale and the slower early stages of Cranston. As with most new developing communities, initial start up is typically slow but the sector is expected to pick up as Cranston develops.

- Development is ongoing in Douglas Glen/Barlow, Cranston, and McKenzie Towne.

- As of April 2000, the Southeast sector had a total inventory of 921 vacant single family/duplex lots and 1,596 acres of land with utility capacity in place, able to accommodate 10,415 additional single family/duplex units.

Demand Assumptions:

- The sector is expected to accomodate approximately 13% of the market through to 2005, or 600 to 700 new single family/duplex units per year.

- Residential growth in this sector has slowed with the build-out of several

communities and the initial start up of Cranston. However, as Cranston begins to emerge it is expected that more historic levels of growth should occur bringing the shares from approximately 11% in 2001 up to 14% by 2005 (Table 13).

Influencing Factors:

- Deerfoot Trail is currently being widened by the Province to an eight lane road between Douglasdale and Marquis of Lorne Trail, and is to be completed by December 2001. Interchanges will be constructed by the Province along Deerfoot Trail at Bariow Trail and Marquis of Lorne Trail as part of this project.

- Two additional interchanges will be constructed by the Province along Deerfoot Trail at McKenzie Lake/Towne Boulevard (December 2002) and 130 Avenue (completion 2003).

- The Province will extend Deerfoot Trail as a new four lane road south of Marquis of Lorne Trail to Highway 2 in 2002. An interchange will also be constructed at 196 Avenue. The City is cost sharing the south extension with the Province.

- The twinning of Glenmore Trail (two lane to a four lane) between 52 Street SE and Barlow Trail and Barlow Trail between Glenmore Trail and Deerfoot Trail is currently underway with anticipated completion in 2001.

- The widening (two lane to four lane) of Glenmore Trail between 52 Street SE to East Freeway (Transportation/Utility Corridor) with anticipated completion in 2003.

- Marquis of Lorne Trail will be twinned between Deerfoot Trail and Macleod Trail in 2005.

- Development of areas south of Marquis of Lorne Trail will require interchanges on Deerfoot Trail at 196 Avenue SE and 212 Avenue SE.

South

Existing Supply:

- The South sector has accommodated a 16% share of the single family/ duplex market growth since 1996, adding 1,000 single family/duplex units per year, on average. The sector's share was 18% for 2000, adding 1,016 units through new building permit applications (Figure 7).

- As of April 2000, the South sector had a total inventory of 2,375 vacant single family/duplex lots and 692 acres of residential land with utility capacity in place, able to accommodate approximately 4,383 additional single family/duplex units.

Demand Assumptions:

- The communities of Chaparral, Millrise, Shawnessy, and Somerset are expected to be built-out over the next five years and the communities of Bridlewood and Evergreen will be the predominate areas for future growth in this area. However, full development of Bridlewood and Evergreen will require the extension of Sarcee Trail from Anderson Road to Spruce Meadows Trail South (formerly Marquis of Lorne Trail).

- Overall, the sector is expected to account for approximately 16 % of the single family/duplex market over the five year period, or an average of 800 to 900 units per year. This has been a dramatic decrease from the last five years in which the sector has had 16% market share (18% over the last two years). This in part, was due to the relatvely slow growth and start up of new developments in the Southeast sector which allowed for stronger growth to the South sector.

Influencing Factors:

- Construction of the Macleod Trail/Anderson Road interchange, began in 1999. The completion date is 2001.

- Marquis of Lorne Trail is expected to be upgraded from two lanes to four lanes between Deerfoot Trail and Macleod Trail in 2005-2007.

- The construction of the 37 Street SW Bridge (three lanes over Fish Creek) is to occur in 2004 to 2005. This will link Anderson Road and 146 Avenue in 2004. The road will be two lanes with climbing/left turn lanes as part of its first stage.

- James McKevitt Drive SW will be completed in 2000 - 2001 and will provide a north-south route (major standard) west of Shawnessy and Millrise. Future ultimate design will be a four lane divided standards.

- The south LRT extension to 146 Avenue will be completed in the fall (October) of 2001, with the further extension to 162 Avenue to be completed in 2003.

- Short-term growth in Chaparral will require a new intersection on Macleod Trail at 194 Avenue. The intersection is located just beyond the City limits and is controlled by the Province. The Province has objected to a traffic signal at this location. Discussions are ongoing.

West

Existing Supply:

- In recent years, the West sector, has had a increasing share of the suburban single family/duplex market. Since 1996 the average has been 9% or 565 units per year. More recently, the sector achieved a 10% market share in 1999, and hit a high of 15% in 2000, adding 885 single family/duplex units through new building permit applications (Table 5, and Figures 6 and 7).

- As of April 2000, the West sector had a total inventory of 2,292 vacant single family/duplex lots and 789 acres of land with utility capacity in place, able to accommodate an additional 3,493 single family/duplex units.

Demand Assumptions:

- There exists a broad variety of choice with development continuing in Strathcona, Discovery Ridge, West Springs, Signal Hill, Cougar Ridge, Crestmont, Aspen Woods and Springbank Hill. It is expected that, due to this availablity of market choice, single family/duplex demand in the sector will increase to an average of 14% through to 2005, or approximately 750 new houses per year.

- As many of the communities in the Northwest sector build-out over the next few years it is expected that some market share will to move into the West sector. Given this, the market share over the next five year period should reflect the recent higher levels.

Influencing Factors:

- The upgrading of 69 Street SW to a major standard road from Highway 8 to 34 Avenue SW is currently complete.
- The City has approved construction of the extension of Bow Trail from Old Banff Coach Road to 85 Street NW. As well, Old Banff Coach Road west of 69 Street SW is being upgraded.
- The Trans Canada Highway will be widened from a four lane road to a six lane road between Bowfort Road and Stoney Trail, with construction complete in 2001.
- Glenmore Trail will be widened from a four lane road to a six lane road between Crowchild Trail and Sarcee Trail in 2005.
- Construction of Stoney Trail, by the Province, as a four lane road between Highway 8 and Trans Canada is anticipated to occur between 2006 and 2010.

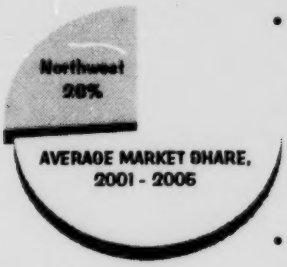
Northwest

Existing Supply:

- The Northwest sector remains the city's largest and strongest growth corridor, and has averaged a 27% share of the new single family/duplex market or 1,732 units per year, since 1996 (Table 5 and Figure 6). The sector continued to maintain strong market shares of 29% in 1999, 28% in 2000, adding 1,632 single family/duplex units through new building permit applications.
- As of April 2000, the Northwest sector had a substantial inventory of 4,049 vacant single family/duplex lots and 1,525 acres of land with utility capacity in place, able to accommodate roughly 7,293 additional single family/duplex units.

Demand Assumptions:

- The completion of six communities should occur over the next five years with the build-out of: Arbour Lake, Citadel, Edgemont, Scenic Acres, The Hamptons, and Valley Ridge. Leaving the communities of Royal Oak, Rocky Ridge and Tuscany as the only areas available for future housing construction. Changes to the sector boundaries this year has taken the area of Symons Valley out of the Northwest sector and placed it into the North Sector.



- It is expected that activity in the sector will remain strong over the forecast period, averaging 26% of the single family/duplex market, or about 1,350 units annually. However, with the reduction in available choice and the completion of many of the communities within the Northwest, a general decline in market share could be expected for the sector later in the forecast period (around 22% in 2005).

- The existing inventory of serviced land should be sufficient to accommodate expected demand throughout the five year forecast period and beyond. No further extensions of major utilities are likely to be required in the short-term.

Influencing Factors:

- Crowchild Trail will be widened from four lanes to six lanes between 53 Street and Rocky Ridge Road in 2004 and 2005.

- Shaganappi Trail will be twinned from two lanes to four lanes between Country Hills Boulevard and Edgemont Boulevard in 2004.

- Stoney Trail will be built by the Province as a minimum two lane road between Country Hills Boulevard and Beddington Trail in 2007.

- Construction is ongoing for the extension of LRT to 53 Street/Dalhousie Station, including a Park 'n' Ride lot. The Crowchild/Shaganappi Trail Interchange was opened in the fall of 2000. The construction of interchanges on Crowchild Trail at Brisebois Drive, Northland Drive and 53 Street NW is planned for 2001 and 2003.

- Upgrades to the Trans Canada Highway/Valley Ridge Boulevard interchange began in 2000, including widening a section of Trans Canada Highway from Valley Ridge Boulevard to Bowfort Road to six lanes. This widening will relieve congestion from traffic coming from the West and Northwest sectors. Completion is expected in 2001.

- A major rebuild of Rocky Ridge Road began in 1999, to service growth in Rocky Ridge and Royal Oak. An agreement is in place to stage upgrading of Rocky Ridge Road from two to four lanes, and to construct CountryHills Boulevard from Rocky Ridge Road to Stoney Trail.

10

Servicing Implications

The Need For Utility Extensions

The serviceable residential land supply, that is, the existing inventory of vacant single family/duplex lots and the unsubdivided areas with "Utility Capacity in Place" (the green areas in Appendices I and II), together provide enough capacity for an estimated 47,900 single family/duplex units or approximately 144,000 to 153,000 people. **These lands should provide sufficient inventory to accommodate expected city-wide demand through the five year forecast period. However, there will be serviced land shortages in particular sectors within the next five years. Extension of City utilities will be required if these sectors are to continue developing.**

The timing of utility extensions is to be reviewed in the context of the policies contained in the Calgary Plan. The following specific policies provide the basis for this review:

- *The City will endeavour to accommodate growth while at the same time attempting to avoid premature investment in municipal infrastructure (2-2.2.2.1G).*

- *Make decisions on capital expenditures relating to the extension and/or upgrading of municipal water, storm, sanitary, and transportation systems, through the normal budgeting process and after consideration has been given to: the overall capital cost implications of the extensions, including*

  - *the cost of other services The City provides;*
  - *the municipality's financial capability;*
  - *existing market conditions and anticipated demand as they relate to the proposed expenditure; and*
  - *the impact of these decisions on the provision of gas, electric, telephone and cable services. (2-2.2.2.1I)*

- *Evaluate actual expenditure decisions related to the construction of municipal infrastructure through The City's Short-Term Growth Management decision-making process. (2-2.2.2.1H)*

The Short Term Growth Management Strategy (approved in February, 1985) indicates that, through its normal planning and budgeting processes, The City will endeavour to incorporate sufficient lead times so that it can be in a position to construct the municipal infrastructure required to provide the supply of serviced land determined to be necessary under *Calgary Plan* policy 2-2.2.2.1l.

On the basis of the forecasts and allocations contained in this report, and **if** a reasonable supply of land with "Utility Capacity in Place" is maintained in each sector, The City should consider undertaking or facilitating utility extensions over the next five years in the following sectors:

Sector	Probable Year in Which Utility Extensions Will be Required*	Utility Required to Service Areas with Some Capacity in Place** (Yellow Areas)
North	2001-2002	sanitary and storm
Northeast	---	---
East	---	---
Southeast	2001	water
South	after 2004	sanitary and water
West	2001-2003	storm and water
Northwest	2001-2003	water

**Utility extensions listed here do not identify those required within the timeframe indicated in the previous column. It cannot be assumed that "yellow" areas will be developed before "red" areas (areas with no capacity in place).

Notwithstanding the overall availability of serviced land, it is expected that requests to extend utilities and transportation services into new areas will continue to be made.

Implications of the "Serviceable" Land Supply

In dealing with shortages of land supply in a particular sector, Council may or may not choose to expend funds to service new lands, given the availability of serviced land in other sectors. All scheduled budget information is tentative and subject to final City Council approval for each year's budget. In considering funding, the following implications should be taken into account.

- The development of those areas shown to have major utility capacity in place offers several benefits, including:

  - minimizing the assumption of new debt by The City in accommodating growth in the short-term (i.e., not contributing to an increase in the existing debt/capita ratio);

- reducing pressures on The City's operating budgets in terms of debt servicing and overall operating efficiencies;

- expediting cash recoveries for those acreage assessment expenditures already undertaken in fully-serviced areas. Where there is only a fixed amount of new residential construction each year, development occurring on land requiring additional municipal services will delay the full development of existing serviced areas and extend the cost-recovery period; and

- maintaining current acreage assessment charges at manageable levels by minimizing the accruing interest which subsequent developments must finance over the extended time frame.

• On the other hand, limiting development to those lands having utility capacity currently in place may not satisfy all of the requirements of the marketplace with respect to:

- providing a sufficient number of locational choices for each market segment;

- providing a readily developable supply in each sector.

• In addition, there may be other factors which influence the need for, or the timing, of service extensions in particular areas and which are not strictly related to local demands for residential land. For example, specific service extensions may also satisfy demands for non-residential uses, such as industrial development, or resolve existing servicing problems in the sector.

It is within the context of these divergent interests that The City's growth management processes must:

- provide a context for setting the budgeting priorities of each service department in relation to a shared view of the development pattern expected to emerge over the coming five year period; and

- provide current information upon which Council can respond to the requests of individual landowners situated beyond the fully-serviced areas.

The Short-Term Growth Management Strategy provides mechanisms through which Council can balance these varying interests in a consistent and rigorous way.

This Strategy also serves as the basis for developing cost-sharing agreements on the extension of services into new areas. Specifically, cost-sharing arrangements between The City and developers have been approved for:

- Country Hills Boulevard NW extension;
- Harvest Hills (transportation improvements);
- Panorama Hills (transportation improvements at Country Hills Boulevard/ Deerfoot Trail interchange);
- Martindale (sanitary and storm sewers);
- McKenzie Lake and McKenzie Towne (sanitary and storm sewers);
- Shawnessy/Somerset (storm sewers and transportation);
- Patterson Heights (sanitary and storm sewers);
- Strathcona Cell H (sanitary and storm sewers);
- Arbour Lake (storm sewers);
- Crestview (waterworks);
- Crowchild IV/Hamptons (transportation improvements);
- Rocky Ridge (sanitary and storm sewers and transportation);
- Valley Ridge (sanitary sewers and transportation);
- West Scenic Acres/Tuscany (sanitary and storm sewers and transportation improvements); and
- Royal Oak (waterworks).

Servicing Implications By Sector

This section briefly describes the major **utility requirements** to service future residential development in each sector (the "yellow" and "red" areas shown on Maps 1 to 7 in Appendix II). However, notwithstanding the identification of these infrastructure requirements in this report, there is no assurance that individual elements will actually be constructed in the short-term, as a result of capital funding constraints.

North Sector

Coventry Hills and Panorama Hills:

Sewers:

- The "yellow" area in Coventry Hills requires the construction of a new storm outfall to Nose Creek with a new trunk. Alignment for the trunk has yet to be determined. It is anticipated that the North Beddington Storm Trunk will be constructed by the developer in 2002. Financing with Wastewater & Drainage have yet to be negotiated.

- Development of the "yellow" and "red" areas in Panorama Hills requires extension of the North Beddington Sanitary Sewer trunk by the developer in 2001-2003.

Waterworks:

- The "red" area also requires construction of the Spyhill North Pump Station in 2001-2002 and the Spyhill North Feedermain Phase 1 and 2 in 2002-2004.

Symons Valley:

Sewers:

- Wastewater & Drainage has budgeted in 2003 and 2005 to reimburse the developers for construction of the Beddington Creek Phase 2 Sanitary Trunk and a regional lift station.

- Stormwater drainage will be diverted to West Nose Creek, with storm containment facilities and pipes being constructed by developers.

Waterworks:

- Waterworks can service the initial phases of Symons Valley through the Spyhill North Feedermain that will be constructed in Panorama Hills in

2002-2003. Extensions to this feedermain can occur along Symons Valley Road to 112 Avenue. Servicing of the south portion of Symons Valley can occur in the short-term through distribution main extensions across the Transportation/Utility Corridor (TUC) via the Top Hill / Nose Hill pressure zones.

- Symons Valley will not have full utility capacity until the Spyhill North Pump Station is built and a feedermain is constructed between the pump station and the existing feedermain at Symon's Valley Road, immediately south of 112 Avenue. These facilities will be required to service development in the Spyhill Pressure Zone.

- The "red" area above the elevation of 1148 m (Big Hill Pressure Zone) requires a feedermain extension on Sarcee Trail and a reservoir near the city limits to the north.

North Sector Overall:

- Long-term growth in the North and Northeast Sectors will require construction of the Big Hill East reservoir (to be located on the western edge of Nose Hill Park), in conjunction with the phased extension of the Shaganappi Trail Water Feedermain between the Big Hill Pump Station and the Beddington Reservoir.

Northeast Sector

Waterworks:

- Waterworks is currently constructing the Northeast (Stoney) TUC Feedermain (2001) which will help service proposed power plants in the northeast corner of the city. The Falconridge Feedermain Phase 2 and 3 are also under construction.

- The 60 Street NE Feedermain Phase 1 is planned for construction as development extends to the North.

East Sector

East Sector Overall:

- No future residential areas exist. No further additions to the residential land base are expected for this sector in the short to medium-term.

Southeast Sector

McKenzie Towne:

Sewers:

- Build-out of portions of the area will require extension of a sanitary sewer trunk as part of the proposed New Brighton and Copperfield subdivisions. Servicing will be via lift station pumping back to the McKenzie Trunk. Only portions of these subdivisions will be approved for development until such time as the Shepard storm system is available. Financing arrangements with Wastewater & Drainage my be required to be negotiated.

Cranston:

Sewers:

- Development of the area will require storm and sanitary infrastructure.

- The developer funded sanitary trunk for this area will be directed to the future Pine Creek Wastewater Treatment Plant which is expected to be operational by 2007.

Waterworks:

- Development of the area will require water transmission system improvements, including feedermain extensions, a new reservoir and a new pump station.

Southeast Cell A (East of Cranston):

Sewers:

- Development of the area requires storm and sanitary infrastructure.

Southeast Sector Overall:

- Pine Creek Wastewater Treatment Plant will be designed in 2004 and construction will occur between 2005-2007. The plant is to be operational by 2007.

- Waterworks will undertake the installation of the Deerfoot Feedermain Phase 1-7 and the Cranston Feedermain Phase 2-3 in 2001-2002, in conjunction with road construction of Deerfoot Trail.

South Sector

Chaparral:

Waterworks:

- The Macleod Trail Feedermain Phase 1, servicing growth in Chaparral and located between 162 Avenue SW and Marquis of Lorne Trail, is budgeted for construction in 2005 along this alignment. This is required to reinforce the distribution network in the Chaparral area.

Somerset, Bridlewood, Evergreen:

Sewers:

- The area will require extension of the Midnapore Sanitary Sewer Trunk along 162 Avenue SW to 24 Street SW. A new storm trunk will be required to service the Fish Creek / 37 Street Storm Catchment. Financing arrangements with Wastewater & Drainage may be required to be negotiated.

- The area will also require the extension of a new storm outfalll to Fish Creek, subject to Provincial approval and resolution of financing. Wastewater & Drainage have budgeted to construct the Fish Creek / 37 Street Storm Trunk in 2004 and 2005.

Waterworks:

- The area will require the construction of a water pump station before development can proceed. Water distribution main extensions or feedermain extensions will also be required. Waterworks will design the Evergreen Ridge Pump Station in 2004 and plan to undertake construction in 2005.

- Growth in this sector, west of Macleod Trail will require an additional reservoir cell at the Lower Sarcee Reservoir site to reinforce the Lower Sarcee Reservoir District. Waterworks plans to construct the Lower Sarcee Reservoir in 2005.

- A water feedermain in Evergreen will be required for further development to the south.

South Sector Overall:

- Pine Creek Wastewater Treatment Plant will be designed in 2004 and construction will occur between 2005-2007. The Pine Creek Sanitary Trunk from the Fish Creek Wastewater Treatment Plant will run on the west side of the Bow River and is expected to be completed on the same schedule as the plant.

West Sector

Calgary West & Cougar Ridge:

Sewers:

- Cougar Ridge storm servicing is extended from the Bow River and a new outfall has been constructed. Sanitary servicing is also in place.

Waterworks:

- A water feedermain extension, across the Bow River, is required to extend south into Calgary West. A water feedermain extension is required along Bearspaw Dam Road in the Northwest Sector prior to the above noted river crossing being in place. A new reservoir with a pump station is required to reinforce the network in Calgary West and to provide service to the 1,248 m contour (Broadcast Hill Pressure Zone). Above 1,248 m, the method of water servicing has not been determined.

- Waterworks plan to construct the Old Banff Coach Road Feedermain Phase 1 in 2004 and 2005.

West Springs, Aspen Woods, Springbank Hill, Discovery Ridge:

Sewers:

- Wastewater & Drainage have budgeted to payback developers for the construction of the 69 Street Storm Trunk in 2003.

- An agreement is in place for a storm sewer through Discovery Ridge to Highway 8. Alignment for storm and sanitary sewer in the 85 Street SW right-of-way north of Highway 8 has been finalized. Wastewater & Drainage has budgeted to payback developers for the construction of the 85 Street Storm Trunk in 2001 and 2003 and for the construction of the 85 Street Sanitary Trunk after 2005.

- The 101 Street SW catchment area will require a new storm trunk and other storm water management facilities.

Waterworks:

- The Broadcast Hill and Strathcona water pressure zones (above 1,169 m) can accommodate a total population of 19,500. Above 19,500 people, A reservoir is required to be located to the west of the existing City limits. This would require feedermains along Old Banff Coach Road.

- A Pressure Reducing Valve Station is required on 85 Street at Glenmore Trail SW for the continued development of Discovery Ridge. Waterworks plan to construct the Discovery Ridge PRV Station in 2005-2006.

- The Glendale and West Calgary water pressure zones can accommodate development below the elevation of 1,169 m between 69 Street SW and the eastern edge of the major ravine in Sections 3 and 10 of Township 24, Range 2, west of the Fifth Meridian. Development west of this ravine will require connection to an existing transmission/distribution system in the upper Broadcast Hill/Strathcona zones, including pressure reducing valves. A feedermain extension on 69 Street and 17 Avenue to 85 Street will also be required.

Northwest Sector

Rocky Ridge, Royal Oak:

Waterworks:

- The Royal Oak Pump Station is complete and utility capacity is in place. A feedermain extension on 112 Avenue and Rocky Ridge Road NW to the pump station is required for ultimate servicing. Waterworks plans to construct the Research Park Feedermain in 2005.

- Growth in this sector, west of Stoney Trail and north of Crowchild Trail, will require an additional reservoir cell at the Top Hill Reservoir site to reinforce the Top Hill Pressure Zone. Waterworks plans to construct the Reservoir in 2001-2002.

Tuscany, Valley Ridge:

Waterworks:

- Full development of the the "green" area, south of the Bow River, below the elevation of 1216 m, will require a water feedermain extension from the Bearspaw Water Treatment Plant to the south through the Valley Ridge area. Tuscany water feedermain ties to the proposed feedermain on Bearspaw Dam Road, and extends north on 109 Street NW.

- Planned projects are the Tuscany Feedermain Phase 1 and 2 in 2001-2003 and the Valley Ridge Feedermain Phase 1 and 2 in 2002-2003.

Appendix I

Tables, Figures and Maps

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Short-Term Population Projections 2001 - 2005 **Table 1**

Year	Projected Net Migration	Projected Population
2000 (Actual)	11,317	860,749
2001	15,600	882,700
2002	11,200	900,200
2003	9,100	915,500
2004	9,000	930,600
2005	10,800	947,300
Total	67,017	

Source: Corporate Strategy & Economics, 2000

Forecasted Population and Housing Growth 2001 - 2005 (For Single Family/Duplex and Multi-Family Units) **Table 2**

Year	Population	Single Family/Duplex Units	Multi Family Units	Gross Acres of Residential Land Required @ 7 U.P.A.*	@ 6 U.P.A.*	@ 5 U.P.A.*
2000 Actual	860,749	5,834	3,264	830	970	1,170
2001	882,700	6,200	2,400	890	1,030	1,240
2002	900,200	5,750	1,850	820	960	1,150
2003	915,500	5,550	1,450	790	930	1,110
2004	930,600	5,500	1,200	790	920	1,100
2005	947,300	5,600	1,200	800	930	1,120
2001-2005	86,600 People added	28,600 Units added	8,100 Units added	4,090 Acres	4,770 Acres	5,720 Acres

* Units Per Acre Gross Residential Density

Source: Civic Census, 2000
Corporate Strategy & Economics/Planning & Transportation Policy, 2000
Multi-Family includes Apartment and Townhouse Units

Single Family/Duplex Housing 1988 - 2000 **Table 3**
Household Growth and Vacancy Rates

Year	Population Growth	Growth In Occupied Units	Vacant Units	S. F./Duplex Vacancy Rate
88 - 89	14,020	3,342	2,203	1.43%
89 - 90	21,747	4,788	2,279	1.44%
90 - 91	15,708	4,739	2,411	1.48%
91 - 92	8,540	3,223	2,793	1.68%
92 - 93	10,586	4,603	3,104	1.81%
93 - 94	10,465	4,243	3,104	1.77%
94 - 95	10,889	4,315	3,360	1.86%
95 - 96	17,986	4,358	2,900	1.57%
96 - 97	23,439	5,030	2,621	1.39%
97 - 98	28,629	6,799	2,583	1.32%
98 - 99	23,054	*NA	2,734	1.30%
99 - 2000	16,361	5,746	2,858	1.31%

Source: Civic Census, 2000

*Note: Census method changed in 1999 and Occupied Units have been modified from previous method of collection and was not used for that year.

Calgary Housing Starts 1996 - 2000 **Table 4**

Year	Single Family	Duplex/ Semi	Row	Apts.	Total	Total S.F./ Duplex	Total Multi-Family	% Multi-Family
1996	5,031	264	417	515	6,227	5,295	932	15%
1997	7,378	402	873	1,113	9,766	7,780	1,986	20%
1998	7,739	418	714	1,874	10,745	8,157	2,588	24%
1999	5,524	430	508	2,791	9,253	5,954	3,299	36%
2000	5,628	408	644	2,968	9,648	6,036	3,612	37%
Five Year Average	6,716 Units	361 Units	668 Units	1,167 Units	8,913 Units	6,644 Units	2,483 Units	28%

Source: C.M.H.C., 2000 December

Short-Term Population Projections 2001 - 2005 **Table 1**

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2000 (Actual)	11,317	860,749
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Year	Population	Single Family/Duplex Units	Multi Family Units	Gross Acres of Residential Land Required @ 7 U.P.A.*	**@ 6 U.P.A.***	@ 5 U.P.A.*
2000 Actual	860,749	5,834	3,264	830	970	1,170
2001	882,700	6,200	2,400	890	**1,030**	1,240
2002	900,200	5,750	1,850	820	**960**	1,150
2003	915,500	5,550	1,450	790	**930**	1,110
2004	930,600	5,500	1,200	790	**920**	1,100
2005	947,300	5,600	1,200	800	**930**	1,120
2001-2005	86,600 People added	28,600 Units added	8,100 Units added	4,090 Acres	**4,770 Acres**	5,720 Acres

* Units Per Acre Gross Residential Density

Source: Civic Census, 2000
Corporate Strategy & Economics/Planning & Transportation Policy, 2000
Multi-Family includes Apartment and Townhouse Units

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89 - 90	21,747	4,788	2,279	1.44%
90 - 91	15,708	4,739	2,411	1.48%
91 - 92	8,540	3,223	2,793	1.68%
92 - 93	10,586	4,603	3,104	1.81%
93 - 94	10,465	4,243	3,104	1.77%
94 - 95	10,889	4,315	3,360	1.86%
95 - 96	17,986	4,358	2,900	1.57%
96 - 97	23,439	5,030	2,621	1.39%
97 - 98	28,629	6,799	2,583	1.32%
98 - 99	23,054	*NA	2,734	1.30%
99 - 2000	**18,361**	**5,746**	**2,858**	**1.31%**

Source: Civic Census, 2000

*Note: Census method changed in 1999 and Occupied Units have been modified from previous method of collection and was not used for that year.

Calgary Housing Starts 1996 - 2000 **Table 4**

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1999	5,524	430	508	2,791	9,253	5,954	3,299	36%
2000	5,628	408	644	2,968	9,648	6,036	3,612	37%
Five Year Average	6,716 Units	361 Units	668 Units	1,167 Units	8,913 Units	**6,644 Units**	**2,483 Units**	28%

Source: C.M.H.C., 2000 December

Market Share Distribution of New Suburban Single Family/Duplex Housing, And Multi-Family Housing By Sector 1996 - 2000 — Table 5

Sector	1996	1997	1998	1999	2000	Average Share 1996 - 2000
Single Family/Duplex						
North	21%	22%	22%	17%	14%	19%
Northeast	9%	8%	10%	13%	16%	11%
East	4%	4%	4%	1%	0%	3%
Southeast	19%	19%	15%	11%	9%	15%
South	13%	15%	17%	18%	18%	16%
West	7%	6%	7%	10%	15%	9%
Northwest	27%	25%	27%	29%	28%	27%
Suburban Total	100%	100%	100%	100%	100%	100%
Multi Family						
North	5%	18%	5%	16%	8%	10%
Northeast	0%	2%	-1%	7%	6%	3%
East	5%	0%	-1%	13%	6%	4%
Southeast	7%	7%	5%	3%	15%	8%
South	22%	12%	17%	28%	26%	21%
West	41%	28%	40%	13%	18%	28%
Northwest	21%	32%	35%	19%	21%	26%
Suburban Total	100%	100%	100%	100%	100%	100%

* Multi-family includes, apartments and row housing

Source: Policy & Transportation Planning, Building Permits New Units

Multi Family Building Permit Application Comparisons, By New Units Added

Multi Family Comparisons - By Suburban Sectors New Units Added	1996	1997	1998	1999	2000	Average Share 1996 - 2000
Suburban Sectors	1,095	1,871	2,557	2,163	2,857	66%
Central Sector	192	699	1,251	1,370	1,912	34%
City Total	1,253	2,570	3,808	3,533	4,769	100%

* Multi-family includes duplexes, apartments and row housing

Multi Family Comparisons - By Developing Communities New Units Added	1996	1997	1998	1999	2000	Average Share 1996 - 2000
Developing Communities	776	1,469	1,886	1,301	1,963	46%
Remainder of City	477	1,101	1,922	2,232	2,806	54%
City Total	1,253	2,570	3,808	3,533	4,769	100%

* Multi-family includes duplexes, apartments and row housing

Multi Family Comparisons - By Developing Communities New Units Added	1996	1997	1998	1999	2000	Average Share 1996 - 2000
Developing Communities	660	1,236	1,667	1,149	1,747	45%
Remainder of City	401	1,009	1,815	2,085	2,634	55%
City Total	1,061	2,245	3,482	3,234	4,381	100%

* Multi-family includes apartments and row housing

Source: Planning & Transportation Policy, City of Calgary, 2000
Information is based upon Building Permit Applications New Units Added

Units Associated with Residential Building Permit Applications in the Developing Communities, by Sector
January 1 to December 31, 2000

Table 6

Suburban Sectors *Developing Communities Only*	Single Family/Duplex Units: Single Family	Duplex	Total	% of Developing Communities	Multi-Family Units: Row	Apart.	Total	% of Developing Communities	All Units: Total	% of City
North	789	16	805	**14.4%**	35	168	203	**11.6%**	1,008	**10%**
%	78%	2%	80%		3%	17%	20%		100%	
Northeast	803	32	835	**14.9%**	11	0	11	**0.6%**	846	**8%**
%	95%	4%	99%		1%	0%	1%		100%	
East	0	0	0	**0.0%**	0	0	0	**0.0%**	0	**0%**
%	0%	0%	0%		0%	0%	0%		0%	
Southeast	518	5	523	**9.4%**	374	0	374	**21.4%**	897	**9%**
%	58%	1%	58%		42%	0%	42%		100%	
South	935	39	974	**17.4%**	15	438	453	**25.9%**	1,427	**14%**
%	66%	3%	68%		1%	31%	32%		100%	
West	750	96	846	**15.1%**	138	33	171	**9.8%**	1,017	**10%**
%	74%	9%	83%		14%	3%	17%		100%	
Northwest	1,582	28	1,610	**28.8%**	276	259	535	**30.6%**	2,145	**20%**
%	74%	1%	75%		13%	12%	25%		100%	
Developing Communites Total	How much went to the Developing Communities?									
	5,377	216	5,593	**92%**	849	898	1,747	**40%**	7,340	**70%**
%	73%	3%	76%		12%	12%	24%		100%	
Remainder of City	How much went to the Remainder of the City									
	337	172	509	**8%**	413	2,221	2,634	**60%**	3,143	**30%**
%	11%	5%	16%		13%	71%	84%		100%	
City Total	5,714	388	6,102	**100%**	1,262	3,119	4,381	**100%**	10,483	**100%**
%	55%	4%	58%		12%	30%	42%		100%	

Notes: This Table reflects the number of UNITS applied for and NOT the number of applications. (each multi-family project may have a number of units but only one application).

The Table includes applications for NEW BUILDINGS only, and does not include applications to create units through additions or renovations to existing buildings.

Numbers may not add due to rounding.

Source: Planning & Transportation Policy, 2000

Market Share Distribution of New Suburban Single Family/Duplex Housing, And Multi-Family Housing By Sector 1996 - 2000 — Table 5

Single Family/Duplex

Sector	1996	1997	1998	1999	2000	Average Share 1996 - 2000
North	21%	22%	22%	17%	14%	19%
Northeast	9%	8%	10%	13%	16%	11%
East	4%	4%	4%	1%	0%	3%
Southeast	19%	19%	15%	11%	9%	15%
South	13%	15%	17%	18%	18%	16%
West	7%	6%	7%	10%	15%	9%
Northwest	27%	25%	27%	29%	28%	27%
Suburban Total	100%	100%	100%	100%	100%	100%

Multi Family

Sector	1996	1997	1998	1999	2000	Average Share 1996 - 2000
North	5%	18%	5%	16%	8%	10%
Northeast	0%	2%	-1%	7%	6%	3%
East	5%	0%	-1%	13%	6%	4%
Southeast	7%	7%	5%	3%	15%	8%
South	22%	12%	17%	28%	26%	21%
West	41%	28%	40%	13%	18%	28%
Northwest	21%	32%	35%	19%	21%	26%
Suburban Total	100%	100%	100%	100%	100%	100%

* Multi-family includes, apartments and row housing

Source: Policy & Transportation Planning, Building Permits New Units

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City Total	1,253	2,570	3,808	3,533	4,769	100%

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Multi Family Comparisons - By Developing Communities New Units Added	1996	1997	1998	1999	2000	Average Share 1996 - 2000
Developing Communities	776	1,469	1,886	1,301	1,963	46%
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City Total	1,061	2,245	3,482	3,234	4,381	100%

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Information is based upon Building Permit Applications New Units Added

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January 1 to December 31, 2000

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Southeast	518	5	523	**9.4%**	374	0	374	**21.4%**	897	**9%**
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City Total	5,714	388	6,102	**100%**	1,262	3,119	4,381	**100%**	10,483	**100%**
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Notes: This Table reflects the number of UNITS applied for and NOT the number of applications, (each multi-family project may have a number of units but only one application).

The Table includes applications for NEW BUILDINGS only, and does not include applications to create units through additions or renovations to existing buildings.

Numbers may not add due to rounding.

Source: Planning & Transportation Policy, 2000

Units Associated with Residential Building Permit Applications **Table 7**
All Communities in the Sector
January 1 to December 31, 2000

Suburban Sectors *All Communities*	Single Family/Duplex Units				Multi-Family Units				All Units	
	Single Family	Duplex	Total	% of Suburbs	Row	Apart.	Total	% of Suburbs	Total	% of City
North	790	16	806	13.9%	35	168	203	7.8%	1,009	10%
%	78%	2%	80%		3%	17%	20%		100%	
Northeast	878	32	910	15.7%	17	132	149	5.8%	1,059	10%
%	83%	3%	86%		2%	12%	14%		100%	
East	19	2	21	0.4%	12	131	143	5.5%	164	2%
%	12%	1%	13%		7%	80%	87%		100%	
Southeast	522	9	531	9.2%	386	8	394	15.2%	925	9%
%	56%	1%	57%		42%	1%	43%		100%	
South	973	43	1,016	17.5%	20	659	679	26.2%	1,695	16%
%	57%	3%	60%		1%	39%	40%		100%	
West	758	127	885	15.3%	158	319	477	18.4%	1,362	13%
%	56%	9%	65%		12%	23%	35%		100%	
Northwest	1,600	32	1,632	28.1%	276	269	545	21.0%	2,177	21%
%	73%	1%	75%		13%	12%	25%		100%	
How much went to the Suburban Sectors										
Suburban Total	5,540	261	5,801	99%	904	1,686	2,590	69%	8,391	80%
%	66%	3%	69%		11%	20%	31%		100%	
How much went to the Central Sector										
Central Sector	174	127	301	5%	358	1,433	1,791	41%	2,092	20%
%	8%	6%	14%		17%	68%	86%		100%	
City Total	5,714	388	6,102	100%	1,262	3,119	4,381	100%	10,483	100%
%	55%	4%	58%		12%	30%	42%		100%	

Notes: This Table reflects the number of UNITS applied for and NOT the number of applications, (each multi-family project may have a number of units but only one application).

The Table includes applications for NEW BUILDINGS only, and does not include applications to create units through additions or renovations to existing buildings.

Numbers may not add due to rounding.

Source: Planning & Transportation Policy, 2000

Location of Developer Proposals For Residential Subdivision Development in 2000 — **Table 8**

Sector	Hectares	Acres	%	Communities Affected
North	92	227	**9%**	Coventry Hills, Harvest Hills, Hidden Valley, Panorama Hills, Symon's Valley Ph. 1
Northeast	194	480	**19%**	Coral Springs, Martindale, Pineridge, Saddle Ridge, Taradale
East	0	0	**0%**	None in 2000
Southeast	73	181	**7%**	Cranston, Douglas Glen, McKenzie Towne
South	138	342	**14%**	Bridlewood, Cedarbrae, Chaparral, Evergreen, Millrise, Shawnessy, Somerset
West	225	555	**22%**	Altadore (CFB), Aspen Woods, Crestmont, Cougar Ridge, Discovery Ridge, Signal Hill, Springbank Hill, Strathcona Park, West Springs
Northwest	279	688	**28%**	Arbour Lake, Citadel, Edgemont, Hamptons, Rocky Ridge, Royal Oak, Tuscany, Valley Ridge
Total	1001	2,473	**100%**	

Source: Land Use and Mobility, 2000
Developer Survey - Proposed Subdivision Development in 2000

Residential Subdivision Activity, (Tentative Plan Approvals Number of Lots) 1996 to 2000 (five years) — **Table 9**

Tentative Plan Approvals Number of Lots	1996	1997	1998	1999	2000	Total
Single Family	4,811	8,381	7,745	6,088	4,784	**31,809**
Two Family	128	98	222	214	508	**1,170**
Other Multi Family	29	120	75	114	199	**537**
Bareland Condominium	682	351	541	668	643	**2,885**
Total	**5,650**	**8,950**	**8,583**	**7,084**	**6,134**	**36,401**

Source: Planning & Transportation Policy, 2000

Units Associated with Residential Building Permit Applications **Table 7**
All Communities in the Sector
January 1 to December 31, 2000

Suburban Sectors *All Communities*	Single Family/Duplex Units				Multi-Family Units				All Units	
	Single Family	Duplex	Total	% of Suburbs	Row	Apart.	Total	% of Suburbs	Total	% of City
North	790	16	806	**13.9%**	35	168	203	**7.8%**	1,009	**10%**
%	78%	2%	80%		3%	17%	20%		100%	
Northeast	878	32	910	**15.7%**	17	132	149	**5.8%**	1,059	**10%**
%	83%	3%	86%		2%	12%	14%		100%	
East	19	2	21	**0.4%**	12	131	143	**5.5%**	164	**2%**
%	12%	1%	13%		7%	80%	87%		100%	
Southeast	522	9	531	**9.2%**	386	8	394	**15.2%**	925	**9%**
%	56%	1%	57%		42%	1%	43%		100%	
South	973	43	1,016	**17.5%**	20	659	679	**26.2%**	1,695	**16%**
%	57%	3%	60%		1%	39%	40%		100%	
West	758	127	885	**15.3%**	158	319	477	**18.4%**	1,362	**13%**
%	56%	9%	65%		12%	23%	35%		100%	
Northwest	1,600	32	1,632	**28.1%**	276	269	545	**21.0%**	2,177	**21%**
%	73%	1%	75%		13%	12%	25%		100%	
	How much went to the Suburban Sectors									
Suburban Total	5,540	261	5,801	**95%**	904	1,686	2,590	**59%**	8,391	**80%**
%	66%	3%	**69%**		11%	20%	**31%**		100%	
	How much went to the Central Sector									
Central Sector	174	127	301	**5%**	358	1,433	1,791	**41%**	2,092	**20%**
%	8%	6%	**14%**		17%	68%	**86%**		100%	
City Total	5,714	388	6,102	**100%**	1,262	3,119	4,381	**100%**	10,483	**100%**
%	55%	4%	**58%**		12%	30%	**42%**		100%	

Notes: This Table reflects the number of UNITS applied for and NOT the number of applications, (each multi-family project may have a number of units but only one application).

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Numbers may not add due to rounding.

Source: Planning & Transportation Policy, 2000

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East	0	0	**0%**	None in 2000
Southeast	73	181	**7%**	Cranston, Douglas Glen, McKenzie Towne
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Total	**5,650**	**8,950**	**8,583**	**7,084**	**6,134**	**36,401**

Source: Planning & Transportation Policy, 2000

Estimated Supply of Approved Single Family/Duplex Lots in Suburban Areas By Sector, 1999 & 2000 — **Table 10**

Single Family/Duplex Lots

Sector	1999 (April) Lots Under Construction	1999 (April) Vacant Lots	1999 (April) % of Total Vacant Lots	2000 (April) Lots Under Construction	2000 (April) Vacant Lots	2000 (April) % of Total Vacant Lots
North	315	1,588	15%	238	1,497	12%
Northeast	**164**	**1,223**	**12%**	**234**	**1,218**	**10%**
East	24	43	0%	0	0	0%
Southeast	**184**	**912**	**9%**	**162**	**921**	**7%**
South	302	1,769	17%	217	2,375	19%
West	**135**	**1,410**	**13%**	**263**	**2,292**	**19%**
Northwest	516	3,661	35%	660	4,049	33%
Total	1,640	10,606	100%	1,774	12,352	100%

Estimates include registered lots and lots in approved Tentative Plans.
Source: Planning & Transportation Policy, 2000

Distribution of Vacant Serviced Lots, By Sector 2000 & 2001 — **Table 11**

Sector	2000 Vacant Lots	2000 %	2001 Vacant Lots	2001 %
North	871	11%	767	10%
Northeast	945	12%	877	11%
East	0	0%	0	0%
Southeast	809	10%	751	10%
South	1,394	17%	1,173	15%
West	1,354	17%	1,866	24%
Northwest	2,788	34%	2,301	30%
Total Suburbs	8,161	100%	7,735	100%

Source: Urban Development Institute (U.D.I.) Survey,
2000 January & 2001 February

Estimated Supply of Unsubdivided Residential Land By Sector, As of April, 2000 (In Gross Acres) **Table 12**

Sector	Utility Capacity In Place	Some Utility Capacity In Place	No Utility Capacity In Place	Total Supply
North	217	543	3,222	3,982
Northeast	1,187	0	0	1,187
East	0	0	0	0
Southeast	1,596	862	1,276	3,734
South	692	223	419	1,334
West	789	1,366	1,151	3,306
Northwest	1,525	0	0	1,525
Total	**6,006 Acres**	**2,994 Acres**	**6,068 Acres**	**15,068 Acres**

Notes: This inventory includes sites identified for multi-family uses in existing Outline Plans (270 acres). The inventory excludes areas of land annexed in 1989 for which land use policy and/or servicing information is not yet available.

Source: Planning & Transportation Policy, 2000

Estimated Supply of Approved Single Family/Duplex Lots in Suburban Areas By Sector, 1999 & 2000 — **Table 10**

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Northeast	164	1,223	12%	234	1,218	10%
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Northwest	516	3,661	35%	660	4,049	33%
Total	1,640	10,606	100%	1,774	12,352	100%

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Northwest	1,525	0	0	1,525
Total	**6,006 Acres**	**2,994 Acres**	**6,068 Acres**	**15,068 Acres**

Notes: This inventory includes sites identified for multi-family uses in existing Outline Plans (270 acres). The inventory excludes areas of land annexed in 1989 for which land use policy and/or servicing information is not yet available.

Source: Planning & Transportation Policy, 2000

Short-Term Estimates of Single Family/Duplex Housing Demand and Distribution By Sector, For The Developing Communities and the City of Calgary 2001 - 2005 — **Table 13**

Sector	Historical Share 1996-2000 % 5 year	Historical Share 1998-2000 % 3 year	Historical Share 1999-2000 % 2 year	Developing Communities Forecast 2001 %	2001 Units	2002 %	2002 Units	2003 %	2003 Units	2004 %	2004 Units	2005 %	2005 Units	2001 - 2005 Average Share (%)	2001 - 2005 Total Units	2001 - 2005 Total Acres
North	20%	18%	16%	14%	800	16%	850	18%	920	20%	1,010	21%	1,080	18%	4,660	780
Northeast	**11%**	**12%**	**14%**	**14%**	**800**	**13%**	**690**	**13%**	**660**	**13%**	**660**	**13%**	**670**	**13%**	**3,480**	**580**
East	3%	2%	1%	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0
Southeast	**12%**	**11%**	**10%**	**11%**	**630**	**12%**	**630**	**13%**	**660**	**14%**	**710**	**14%**	**720**	**13%**	**3,350**	**560**
South	16%	17%	18%	17%	970	16%	850	16%	820	16%	810	16%	820	16%	4,270	710
West	**9%**	**10%**	**13%**	**15%**	**860**	**15%**	**790**	**14%**	**710**	**14%**	**710**	**14%**	**720**	**14%**	**3,790**	**630**
Northwest	28%	28%	29%	29%	1,650	28%	1,480	26%	1,330	23%	1,160	22%	1,130	26%	6,750	1,130
Total	100%	100%	100%	100%	**5,704**	100%	**5,290**	100%	**5,106**	100%	**5,060**	100%	**5,152**	100%	**26,312**	**4,390**

	City Total Forecast 2001 Units	2002 Units	2003 Units	2004 Units	2005 Units	2001 - 2005 Total Units	2001 - 2005 Total Acres
City Total	**6,200**	**5,750**	**5,550**	**5,500**	**5,600**	**28,600**	**4,770**

Notes: total acres based on 6 upa.

Important Note: Sector Boundary Change between the North and Northwest Sectors (Symons Valley Area is now completely in the North Sector See Maps)
Historical share of growth for the last 5 year period was **92%** for the developing communities and is used to forecast the next 5 years
Numbers may not add due to rounding.
SOURCE: Planning and Transportation Policy, 2001

Short-Term Estimates of Residential Land Supply and Demand Conditions For Single Family/Duplex Uses (By Developing Communities), 2001 - 2005 **Table 14**

Sector	2001	2002	2003	2004	2005	Total Demand 2001-2005	Supply With Utility Capacity (*)	Surplus or Shortfall By 2005(*)
North	133	142	153	168	180	780	180	-600
Northeast	133	115	110	110	112	580	1,184	604
East	0	0	0	0	0	0	0	NA
Southeast	105	105	110	118	120	560	1,556	996
South	162	142	137	135	137	710	673	-37
West	143	132	118	118	120	630	762	132
Northwest	275	247	222	193	188	1,130	1,381	251
Total	950 Acres	880 Acres	850 Acres	840 Acres	860 Acres	4,390 Acres	5,736 Acres	1,346 Acres

Notes: * Unsubdivided land only.

Excludes supply available in existing vacant subdivided lots (refer to Table 10).

12,352 Vacant Single Family/Duplex Units,

2,059 Acres

Also excludes land designated for multi-family uses (270 acres), which was included in Table 12.

Numbers may not total due to rounding.

SOURCE: Planning and Transportation Policy, 2001

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North	20%	18%	16%	14%	800	16%	850	18%	920	20%	1,010	21%	1,080	**18%**	**4,660**	**780**
Northeast	**11%**	**12%**	**14%**	**14%**	**800**	**13%**	**690**	**13%**	**660**	**13%**	**660**	**13%**	**670**	**13%**	**3,480**	**580**
East	3%	2%	1%	0%	0	0%	0	0%	0	0%	0	0%	0	**0%**	**0**	**0**
Southeast	**12%**	**11%**	**10%**	**11%**	**630**	**12%**	**630**	**13%**	**660**	**14%**	**710**	**14%**	**720**	**13%**	**3,350**	**560**
South	16%	17%	18%	17%	970	16%	850	16%	820	16%	810	16%	820	**16%**	**4,270**	**710**
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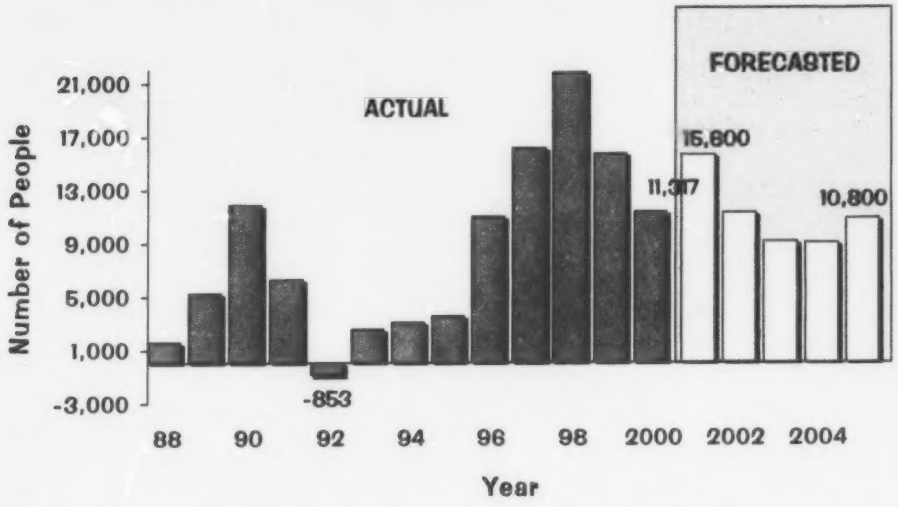
Figure 1

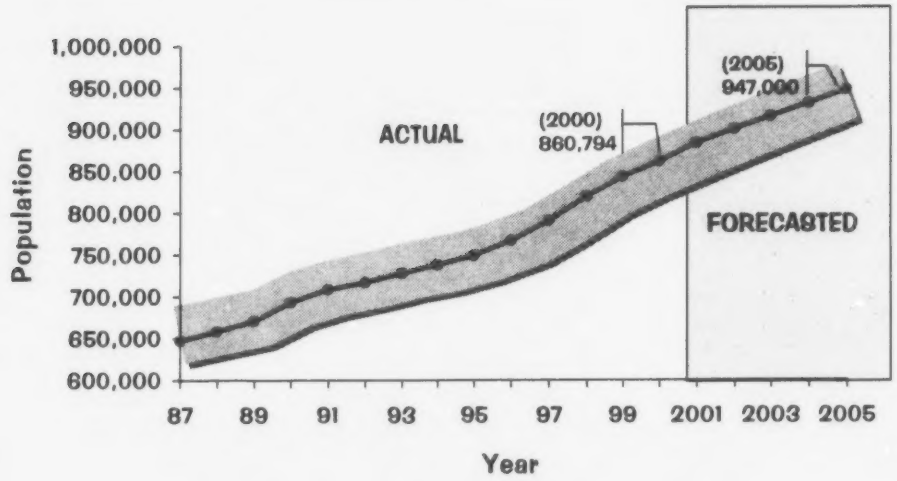
ANNUAL NET MIGRATION FOR CALGARY
ACTUAL (1988 - 2000) AND FORECASTED (2001 - 2005)



REFER TO TABLE 1

Figure 2

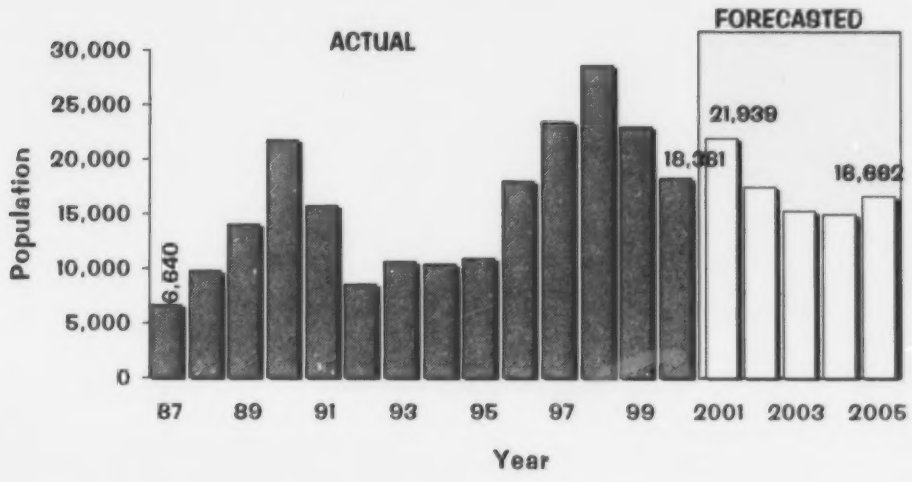
RECENT AND FORECASTED POPULATION GROWTH
FOR CALGARY, 1987 - 2005



REFER TO TABLE 1

Figure 3

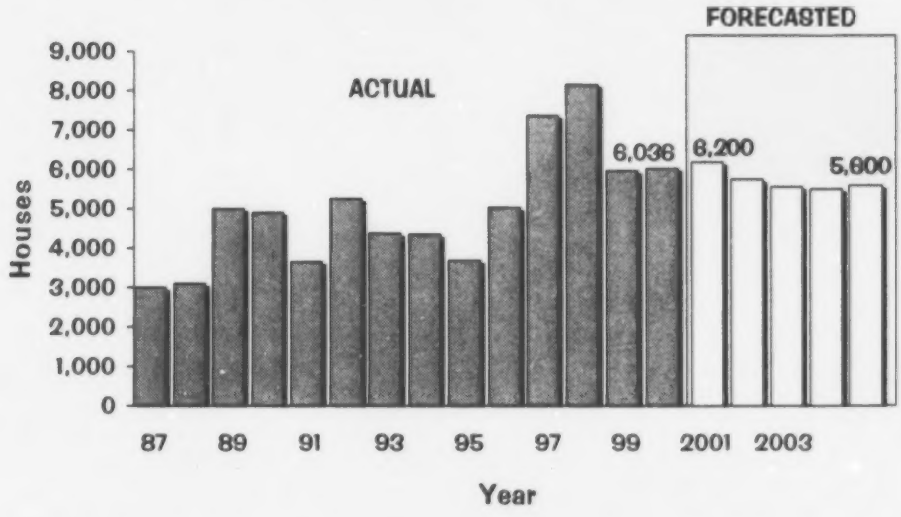
ANNUAL POPULATION GROWTH
ACTUAL (1987 - 2000) AND FORECASTED (2001 - 2005)



REFER TO TABLE 2 AND TABLE 3

Figure 4

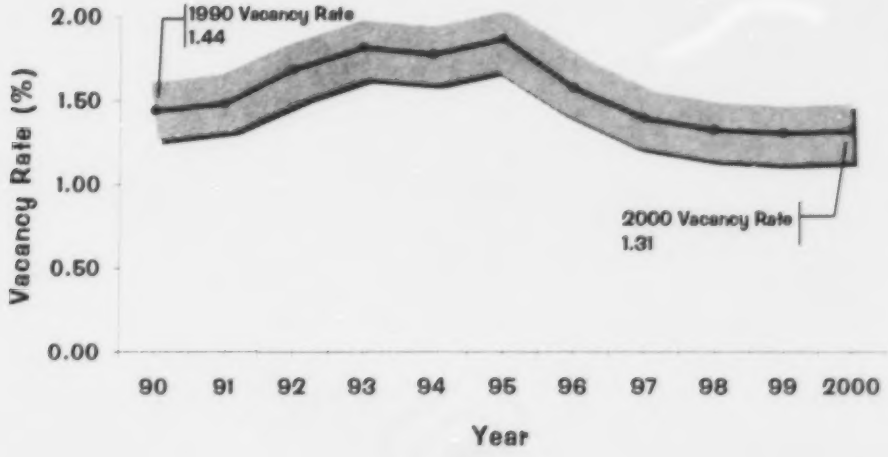
SINGLE FAMILY/DUPLEX HOUSING STARTS,
ACTUAL (1987 - 2000) AND FORECASTED (2001 - 2005)



REFER TO TABLE 2 AND TABLE 4

Figure 5

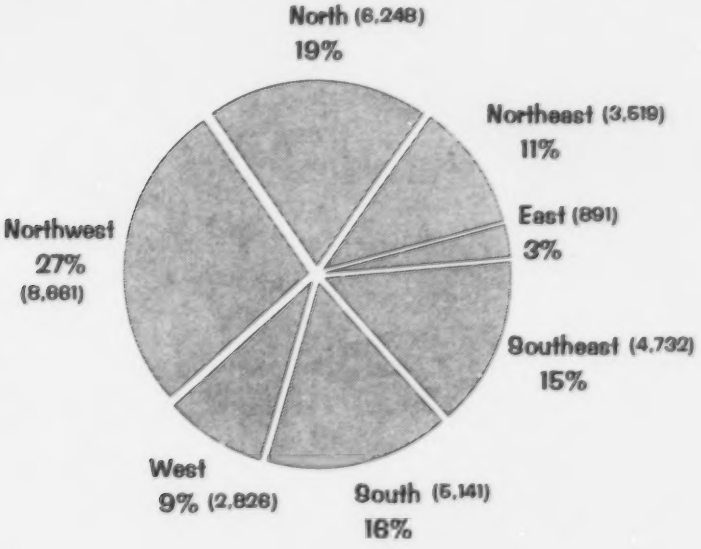
SINGLE FAMILY/DUPLEX VACANCY RATES 1990 - 2000 (APRIL)



REFER TO TABLE 3

Figure 6

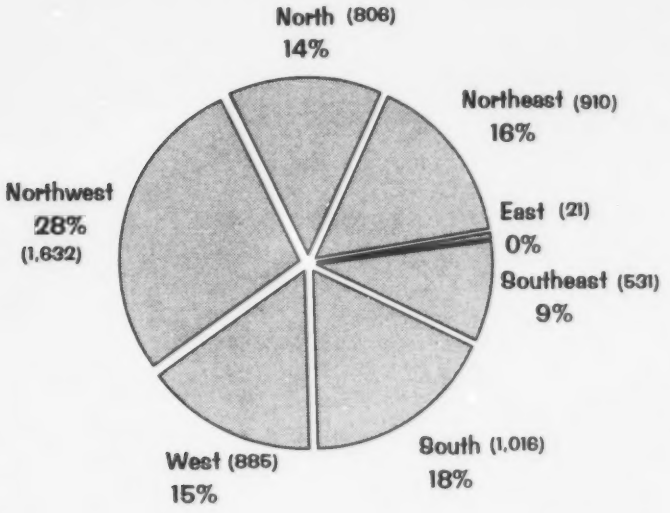
MARKET SHARE OF NEW SINGLE FAMILY/DUPLEX UNITS (Building Permit Applications) BY SECTOR, 1996 - 2000



REFER TO TABLE 5

Figure 7

MARKET SHARE OF NEW SINGLE FAMILY/DUPLEX UNITS (Building Permit Applications) BY SECTOR, 2000



REFER TO TABLE 5 & 7

Figure 8

MARKET SHARE OF NEW SINGLE FAMILY/DUPLEX UNITS (Building Permit Applications) BY SECTOR, 1999

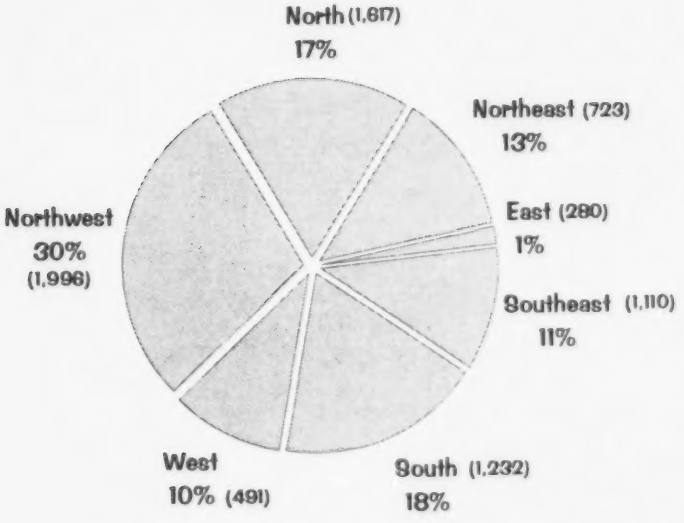
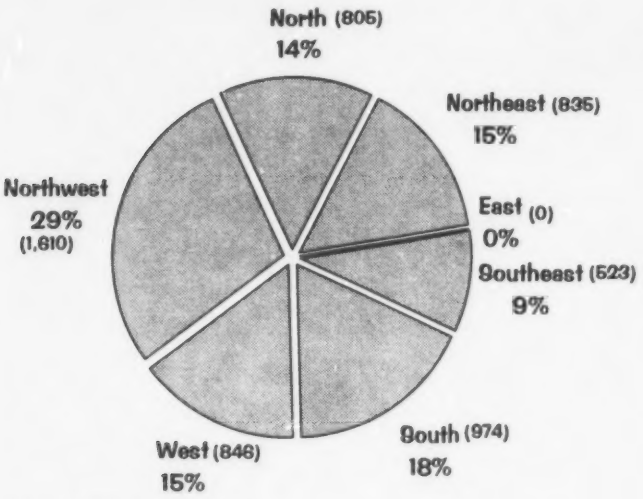


Figure 9

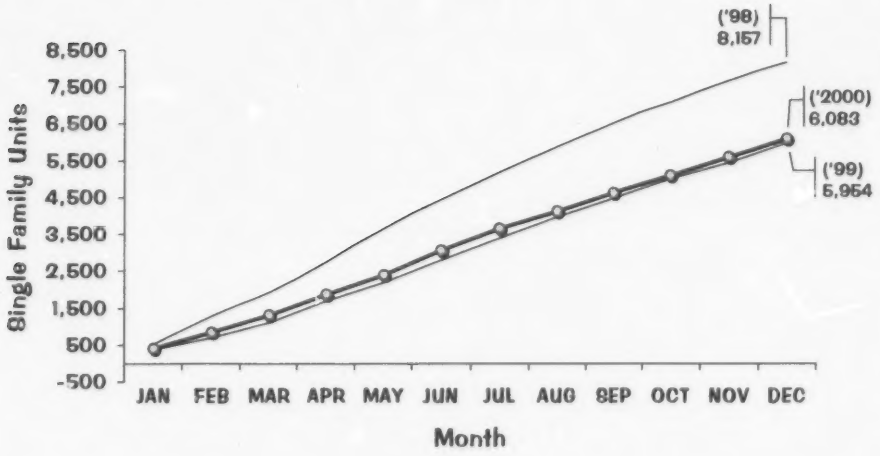
MARKET SHARE OF NEW SINGLE FAMILY/DUPLEX UNITS (Building Permit Applications) BY DEVELOPING COMMUNITIES, 2000



REFER TO TABLE 8 & MAP 7 (For the Developing Communities)

Figure 10

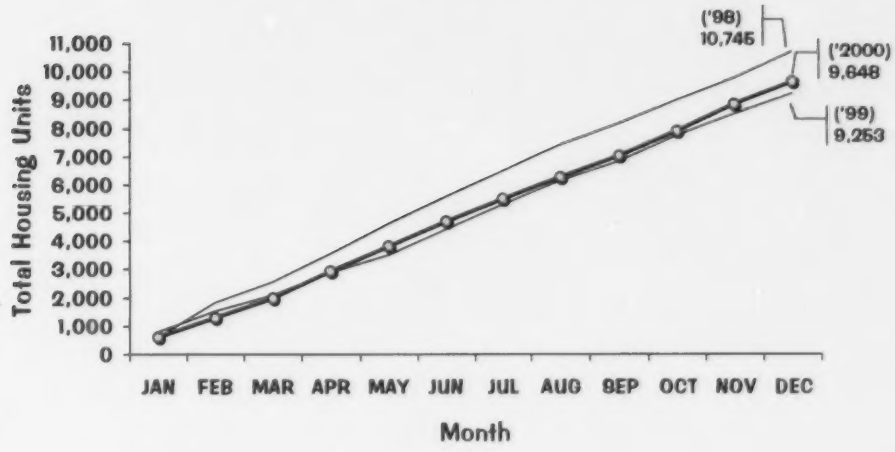
CUMULATIVE SINGLE FAMILY/DUPLEX HOUSING STARTS, BY MONTH, 1998, 1999, AND 2000



Source: Canada Mortgage and Housing Corporation

Figure 11

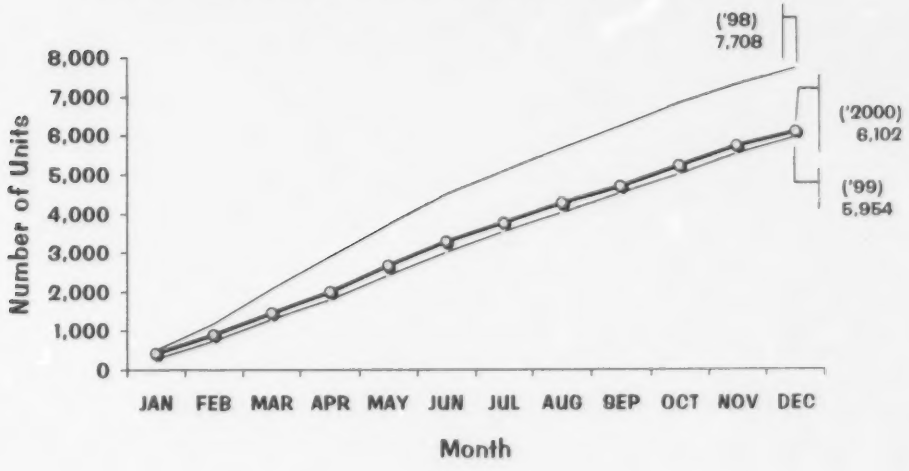
CUMULATIVE TOTAL HOUSING STARTS, BY MONTH, 1998, 1999 AND 2000



Source: Canada Mortgage and Housing Corporation

Figure 12

CUMULATIVE SINGLE FAMILY/DUPLEX BUILDING PERMIT APPLICATIONS, BY MONTH, 1998, 1999 AND 2000



REFER TO TABLE 7

Figure 13

OUTLINE PLAN APPLICATIONS (NUMBER OF ACRES) 1988 - 2000

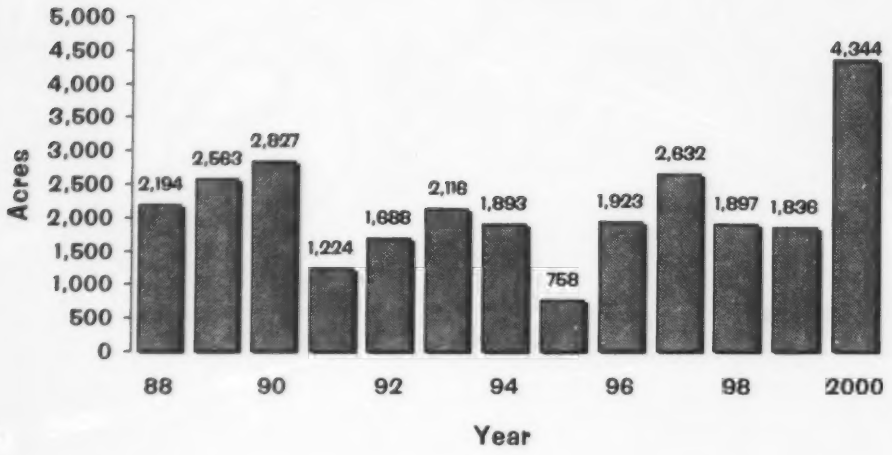


Figure 14

TENTATIVE PLAN APPLICATIONS (NUMBER OF LOTS) 1988 - 2000

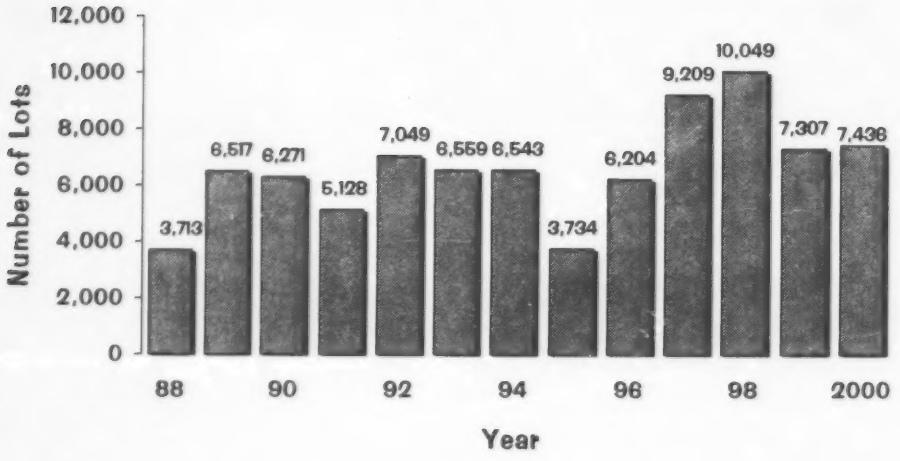
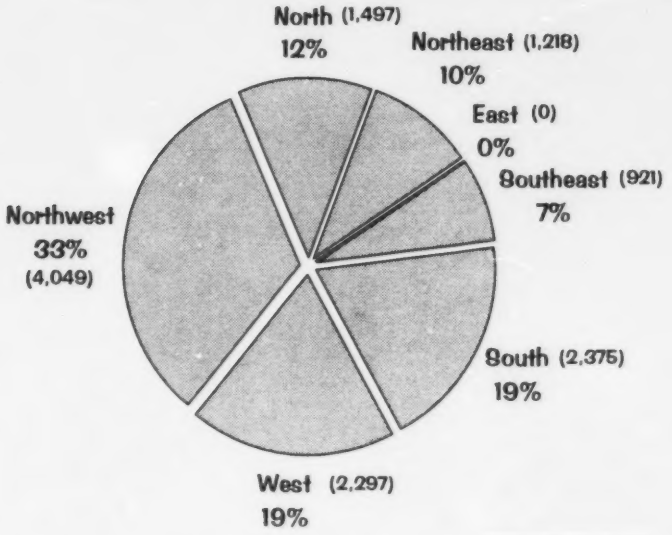


Figure 15

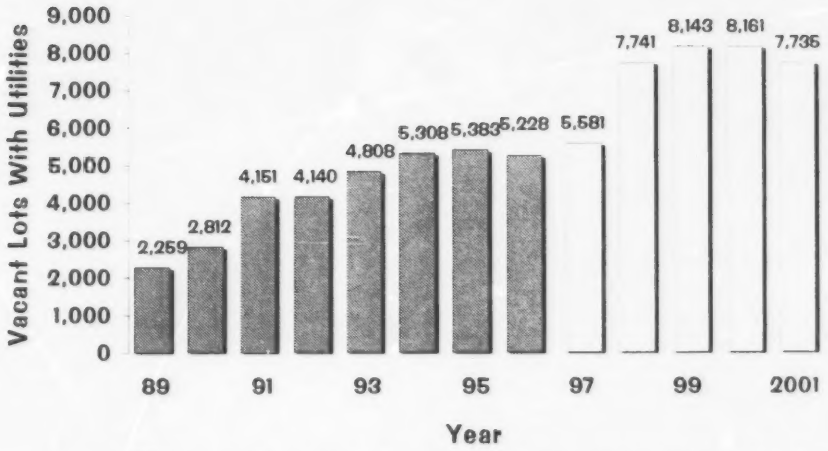
DISTRIBUTION OF VACANT SINGLE FAMILY/DUPLEX LOTS (Estimated) BY SECTOR, APRIL, 2000



REFER TO TABLE 10

Figure 16

VACANT LOT SURVEYS - ENMAX & URBAN DEVELOPMENT INSTITUTE, 1989 - 2001

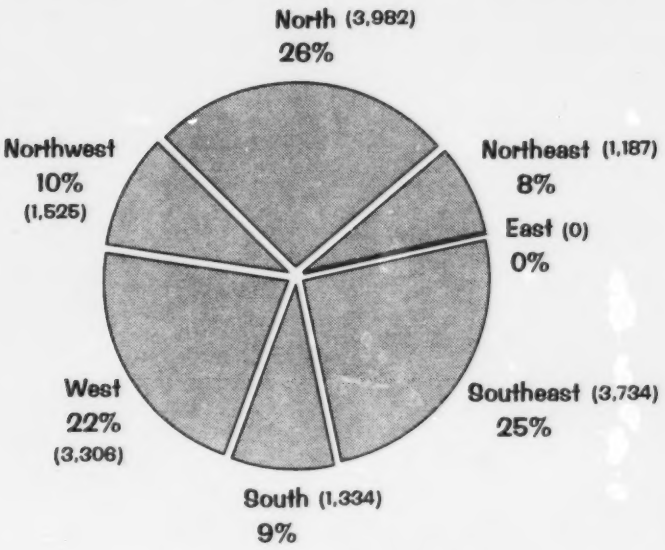


Source: 1986 - 1996 City of Calgary Electric System Survey (Shallow Utilities in Place)
1997 - Present U.D.I. (May or May Not Have Shallow Utilities in Place)

REFER TO TABLE 11

Figure 17

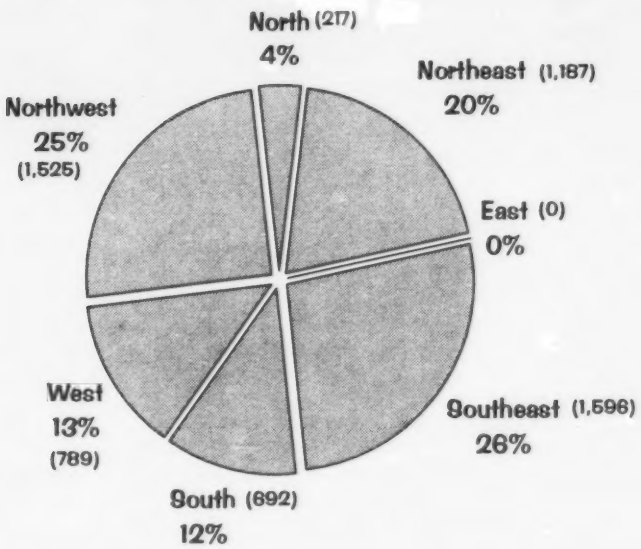
DISTRIBUTION OF THE UNSUBDIVIDED RESIDENTIAL LAND SUPPLY, BY SECTOR (APRIL 2000) (ACRES)



REFER TO TABLE 12

Figure 18

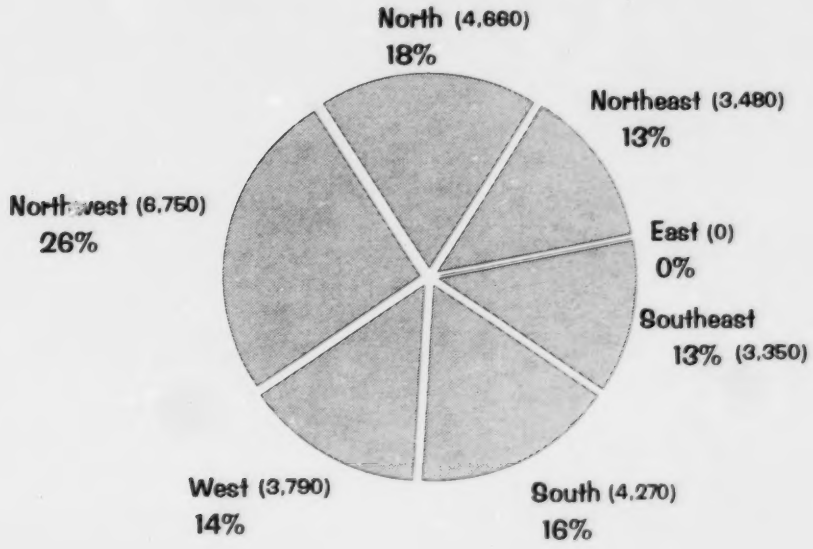
DISTRIBUTION OF THE UNSUBDIVIDED RESIDENTIAL LAND SUPPLY WITH UTILITY CAPACITY IN PLACE, BY SECTOR (APRIL 2000) (ACRES)



REFER TO TABLE 12

Figure 19

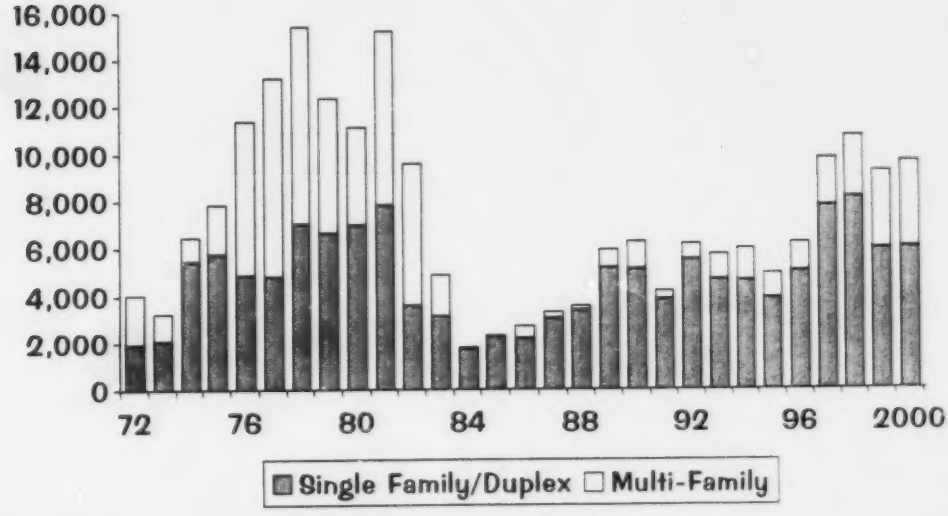
EXPECTED DISTRIBUTION OF NEW SINGLE FAMILY/DUPLEX UNITS, BY SECTOR (Developing Communities), (2001 - 2005)



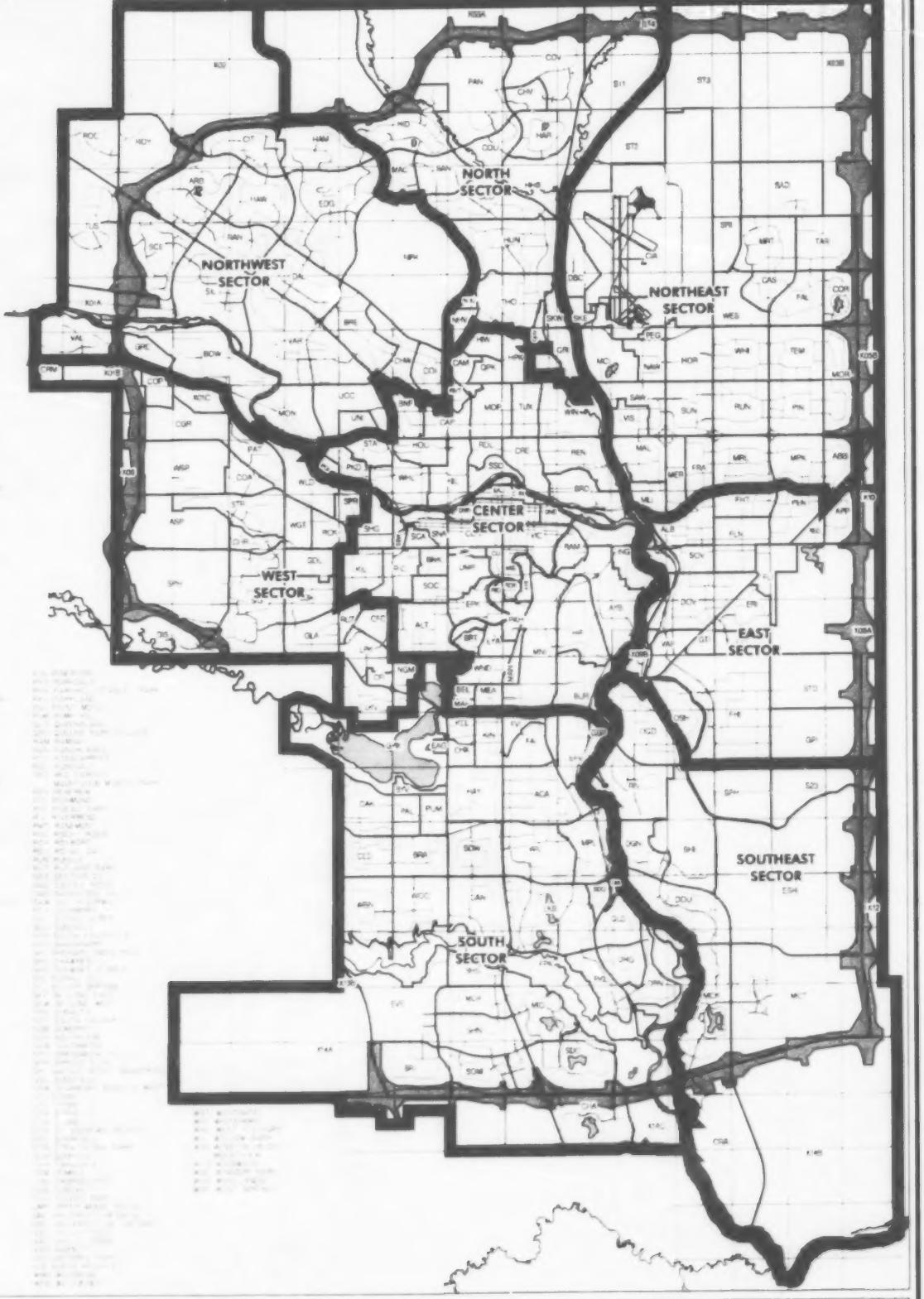
REFER TO TABLE 13

Figure 20

CALGARY HOUSING STARTS SINGLE FAMILY/DUPLEX VS MULTI-FAMILY, (1972 - 2000)



REFER TO TABLE 4



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COMMUNITY DISTRICTS OF CALGARY - 2000

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SHORT-TERM GROWTH
MANAGEMENT STRATEGY

CITY-WIDE
MAP 1

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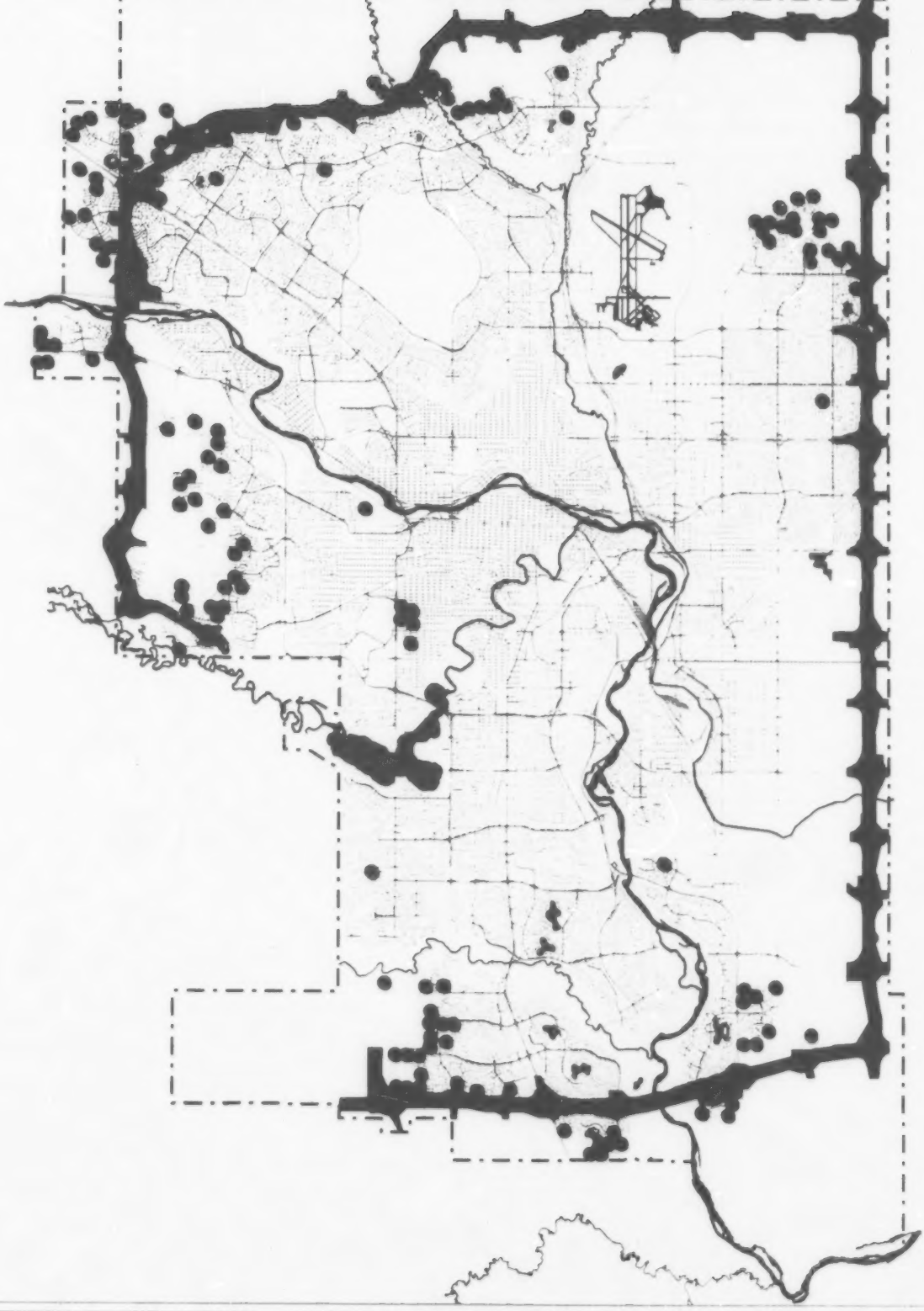

2000 DEVELOPER SURVEY

AREAS IN WHICH DEVELOPERS HAVE INDICATED
ANTICIPATED DEVELOPMENT ACTIVITY

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PLANNING POLICY
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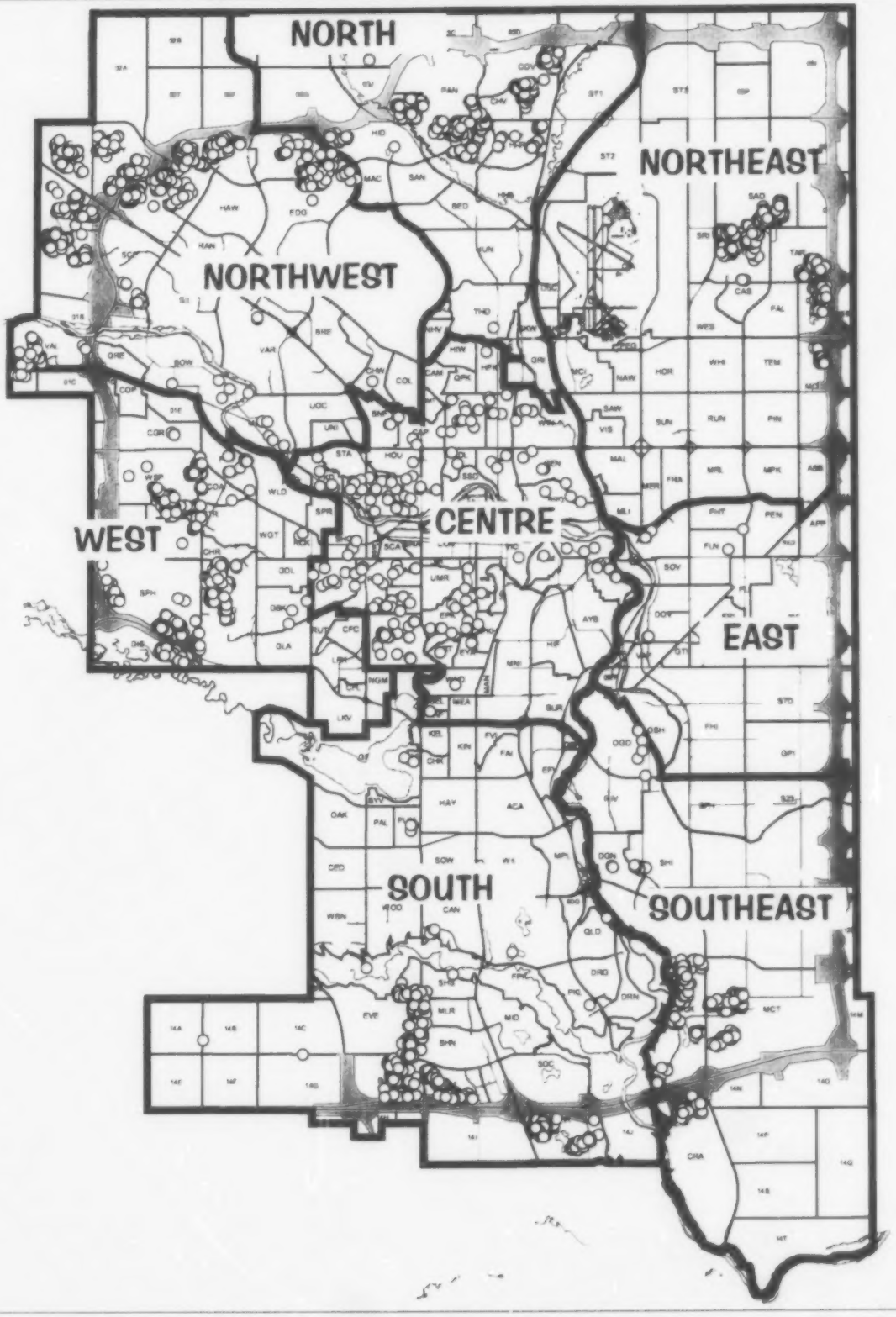
SHORT-TERM GROWTH
MANAGEMENT STRATEGY

CITY WIDE
MAP 2

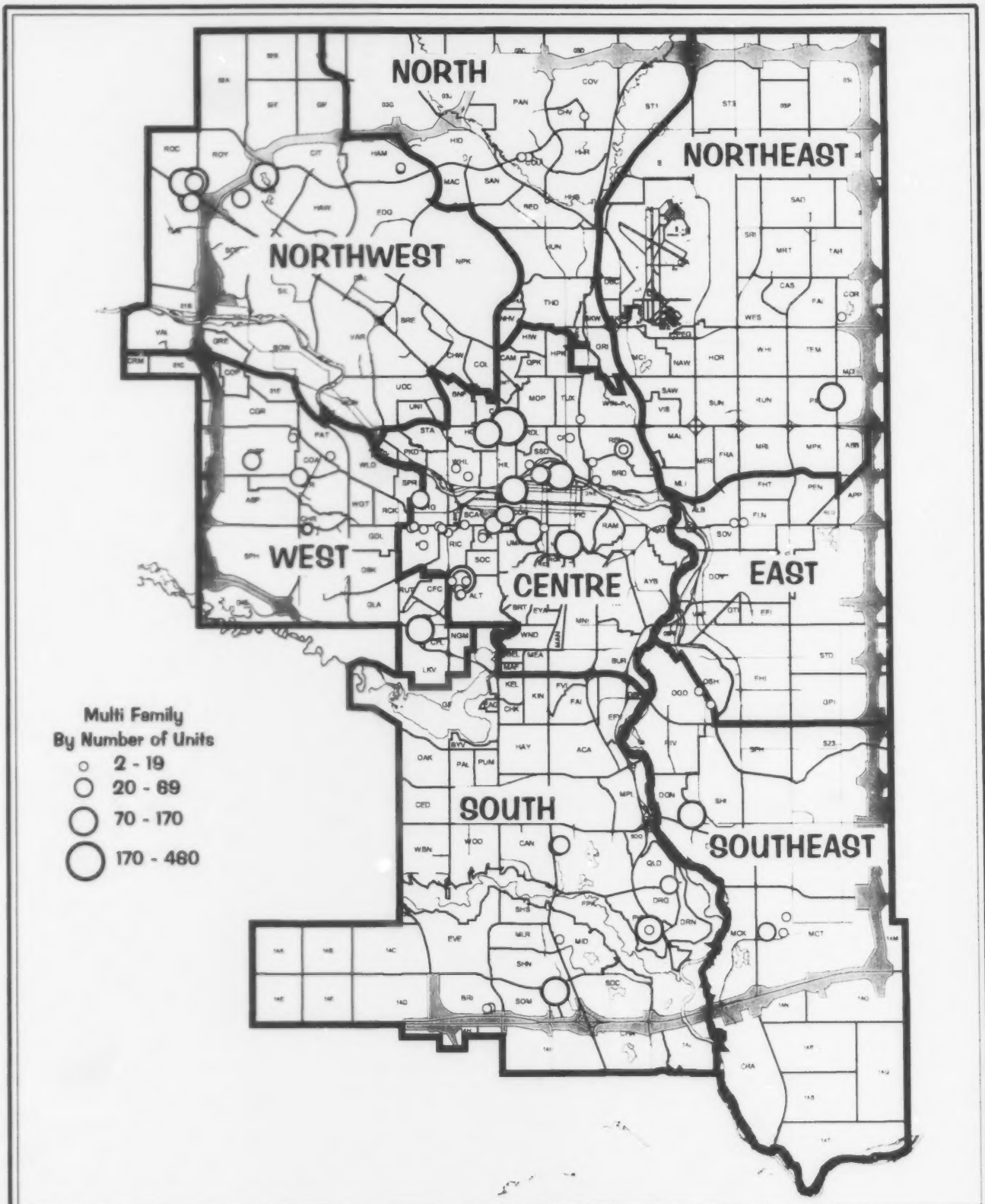


BUILDING PERMIT APPLICATIONS FOR NEW SINGLE FAMILY HOUSES - 2000

THE CITY OF CALGARY

SHORT-TERM GROWTH MANAGEMENT STRATEGY

CITY-WIDE
MAP 3



BUILDING PERMIT APPLICATIONS
FOR NEW MULTI FAMILY UNITS - 2000 (Townhouse and Apartment)

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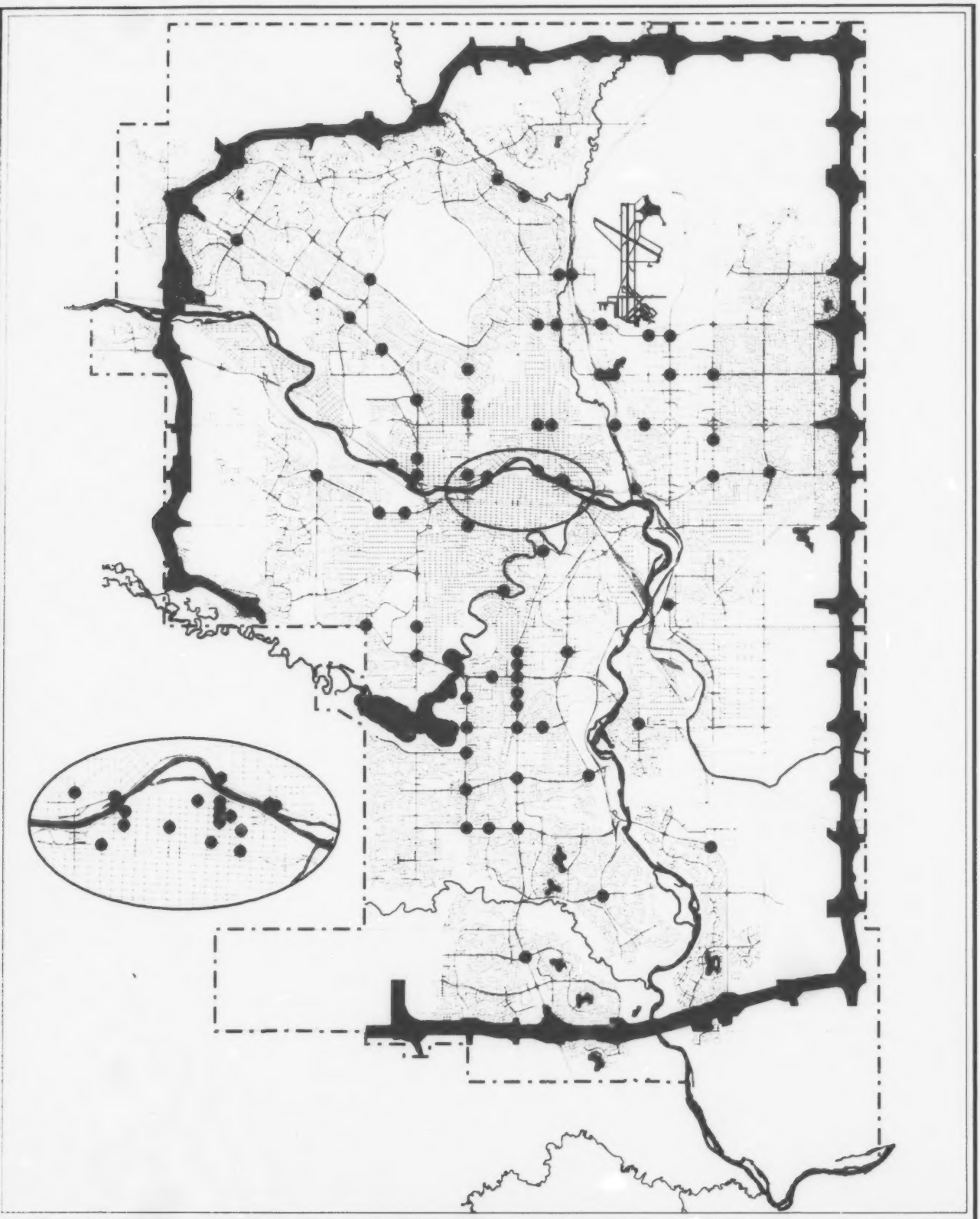
PLANNING AND TRANSPORTATION POLICY

SHORT-TERM GROWTH
MANAGEMENT STRATEGY

CITY-WIDE
MAP 4



CONGESTED SIGNALIZED INTERSECTIONS – 1996

CAPACITY CONSTRAINT LOCATIONS (A.M. AND/OR P.M. PEAK HOUR)
ACCORDING TO INDUSTRY STANDARD MEASURES

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SHORT-TERM GROWTH MANAGEMENT STRATEGY

CITY-WIDE
MAP 5

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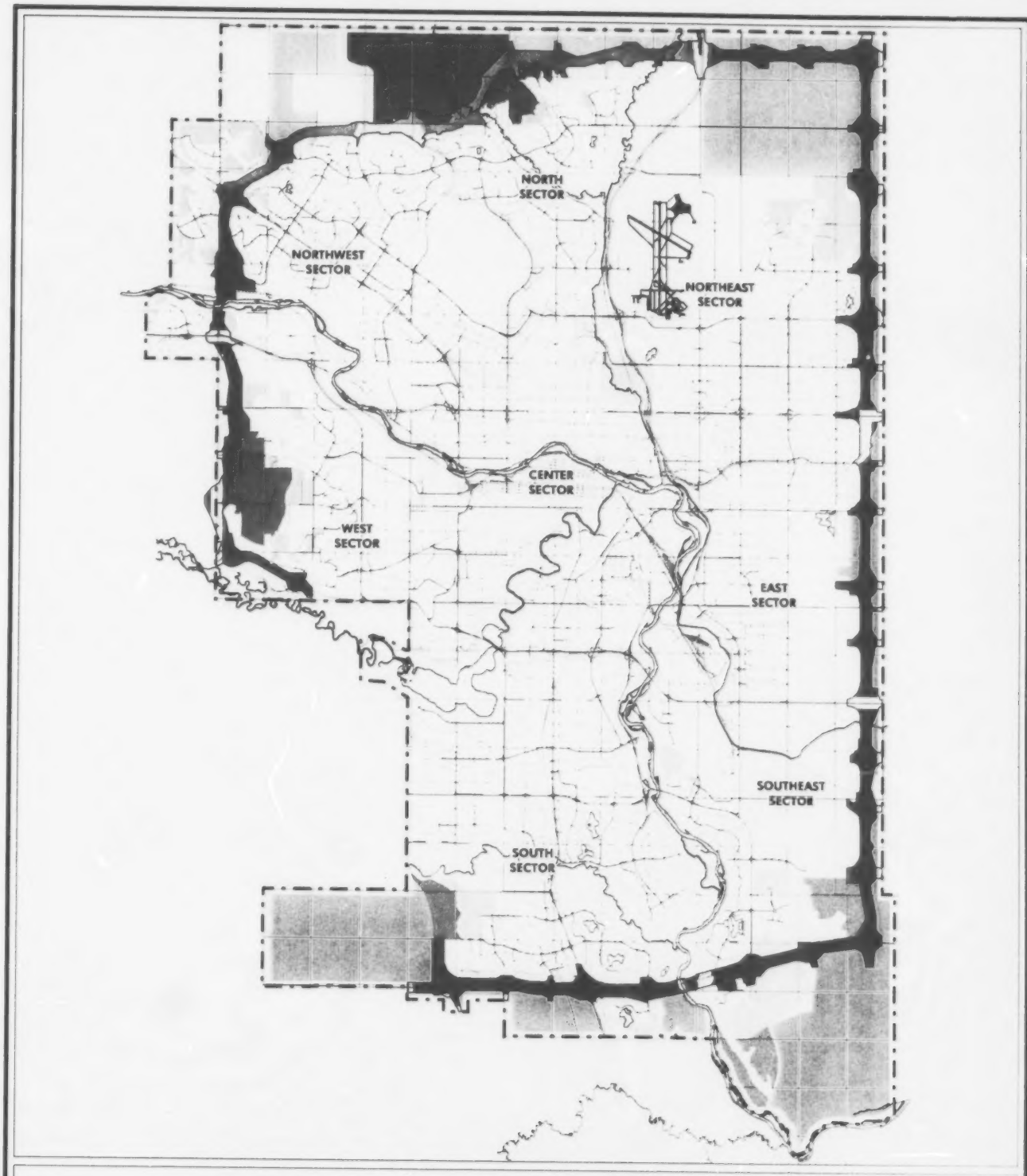

UNSUBDIVIDED RESIDENTIAL LAND SUPPLY (as of April 2000)

- UTILITY CAPACITY IN PLACE (BOTH WATER AND SEWER IN PLACE)
- SOME UTILITY CAPACITY IN PLACE (WATER OR SEWER BUT NOT BOTH)
- NO UTILITY CAPACITY IN PLACE (NO WATER OR SEWER IN PLACE)
- SECTOR BOUNDARY
- AREA SUBJECT TO REVIEW
- TRANSPORTATION UTILITY CORRIDOR

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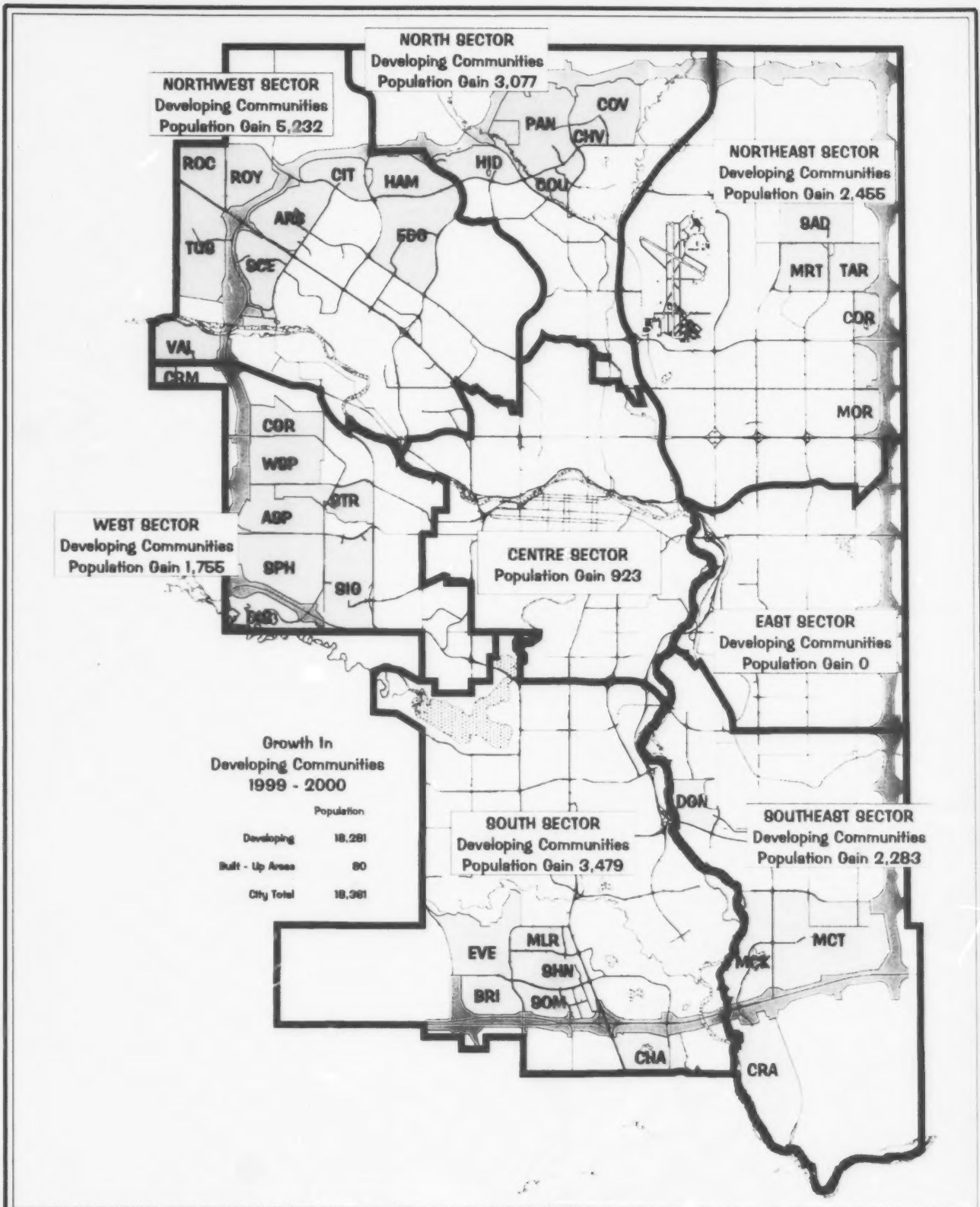
SHORT-TERM GROWTH MANAGEMENT STRATEGY

CITY WIDE
MAP 6



GROWTH IN DEVELOPING COMMUNITIES
1999 - 2000

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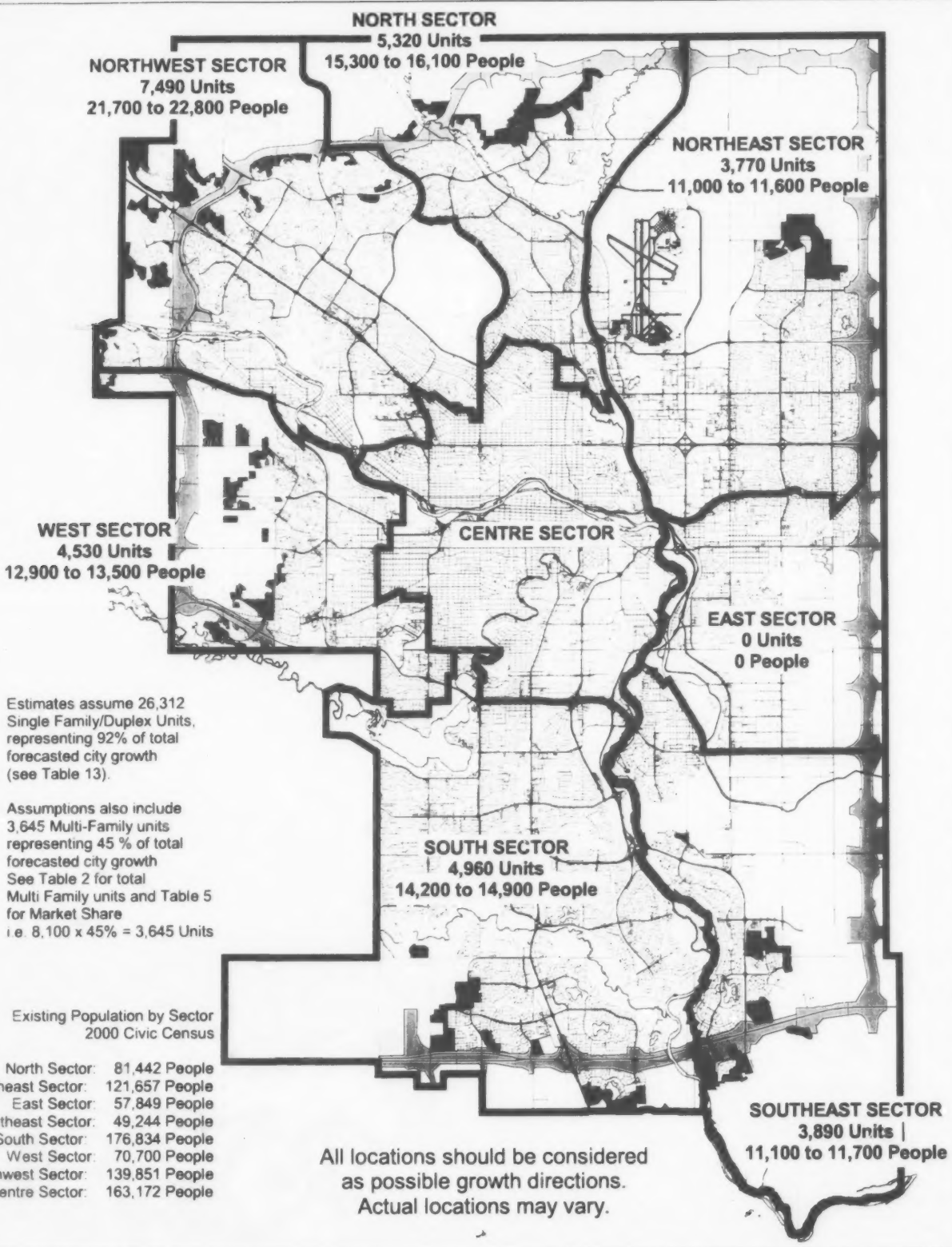
PLANNING AND TRANSPORTATION POLICY

SHORT-TERM GROWTH
MANAGEMENT STRATEGY

CITY-WIDE
MAP 7



Estimates assume 26,312 Single Family/Duplex Units, representing 92% of total forecasted city growth (see Table 13).

Assumptions also include 3,645 Multi-Family units representing 45 % of total forecasted city growth See Table 2 for total Multi Family units and Table 5 for Market Share i.e. 8,100 x 45% = 3,645 Units

Existing Population by Sector
2000 Civic Census

North Sector:	81,442 People
Northeast Sector:	121,657 People
East Sector:	57,849 People
Southeast Sector:	49,244 People
South Sector:	176,834 People
West Sector:	70,700 People
Northwest Sector:	139,851 People
Centre Sector:	163,172 People

All locations should be considered as possible growth directions. Actual locations may vary.

FORECASTED SUBURBAN GROWTH
2001 - 2005

THE CITY OF CALGARY

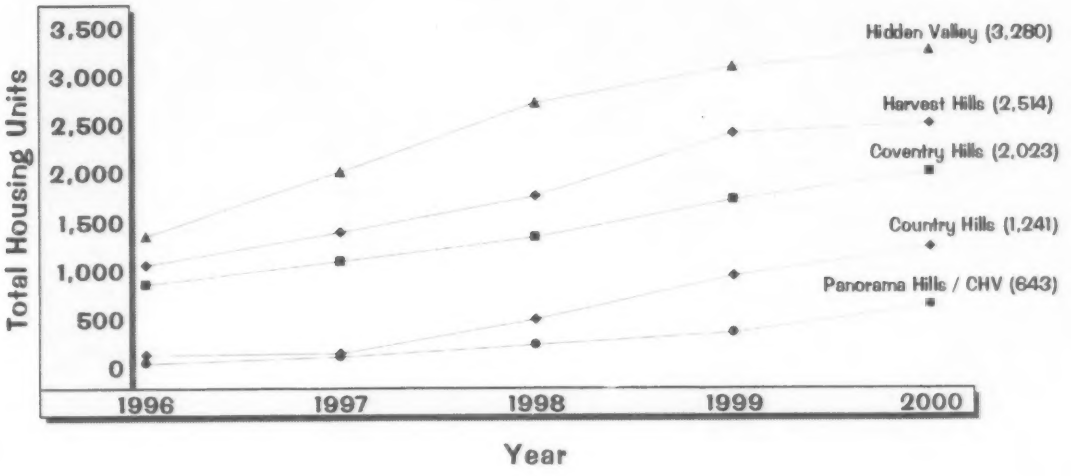
SHORT-TERM GROWTH MANAGEMENT STRATEGY

CITY-WIDE MAP 8

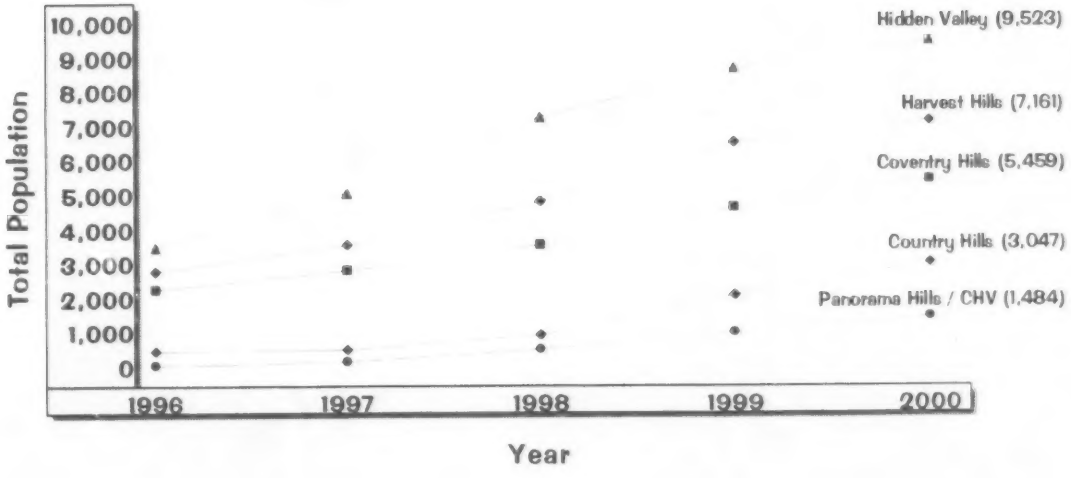
Appendix II

Sector Profiles

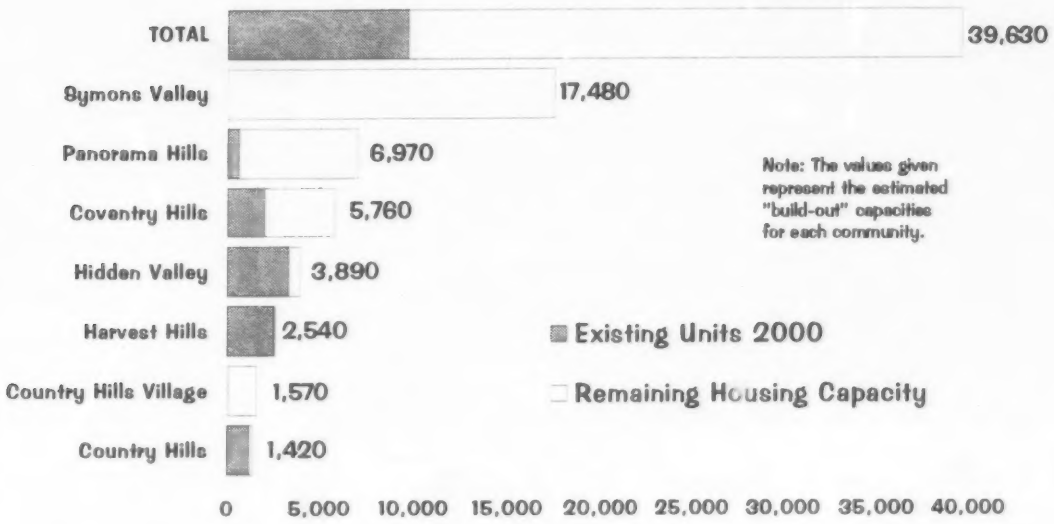
NORTH SECTOR
RECENT GROWTH IN HOUSING



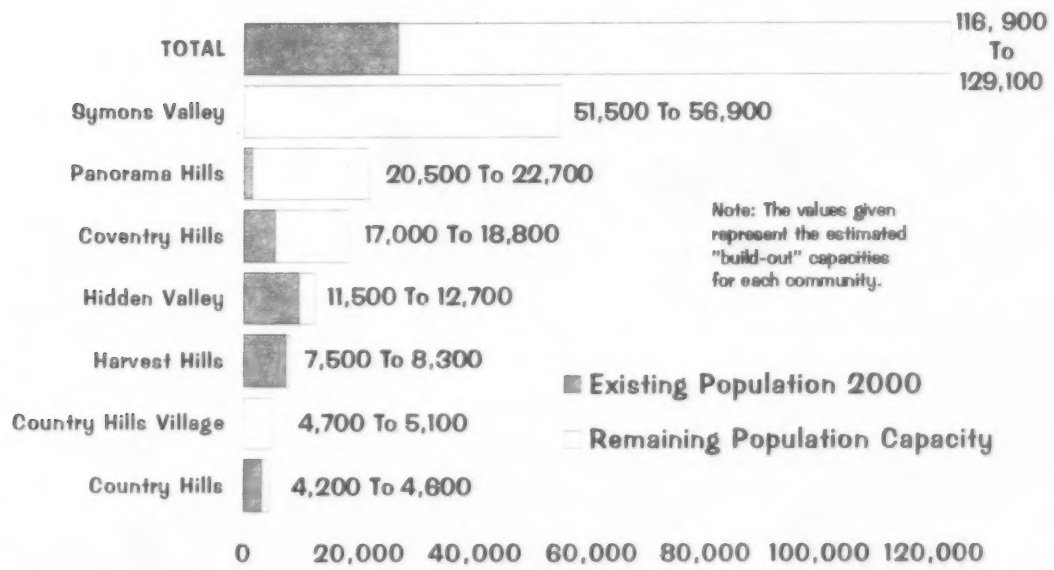
NORTH SECTOR
RECENT GROWTH IN POPULATION



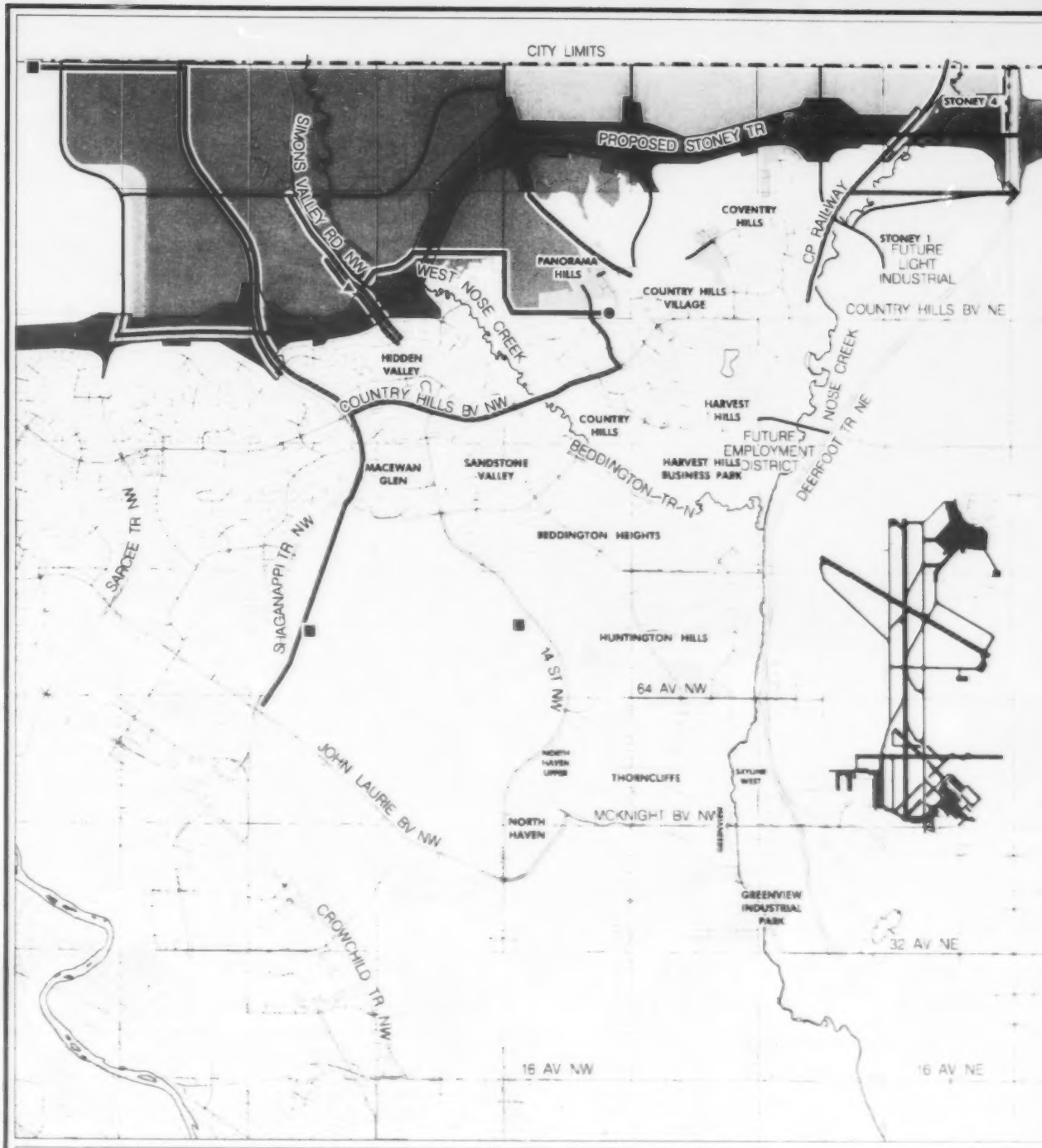
NORTH SECTOR
HOUSING CAPACITY OF DEVELOPING COMMUNITIES



NORTH SECTOR
POPULATION CAPACITY OF DEVELOPING COMMUNITIES



Estimated housing and population capacities are based on planning approvals currently in place and / or on development densities generally being achieved in new areas. Estimates do not include recently annexed lands without policy plans in place (refer to Sector Maps for locations).



UNSUBDIVIDED RESIDENTIAL LAND SUPPLY (as of April 2000)

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- FUTURE SANITARY SEWER TRUNK
- FUTURE STORM SEWER TRUNK
- FUTURE WATER FEEDERMAINS
- FUTURE RESERVOIR
- FUTURE PUMP STATION
- FUTURE PRESSURE REDUCTION STATION
- FUTURE SANITARY LIFT STATION

0 1 Mile
0 1.6 Km

- SECTOR BOUNDARY
- FUTURE EXPRESSWAY
- FUTURE MAJOR ROAD
- TRANSPORTATION UTILITY CORRIDOR

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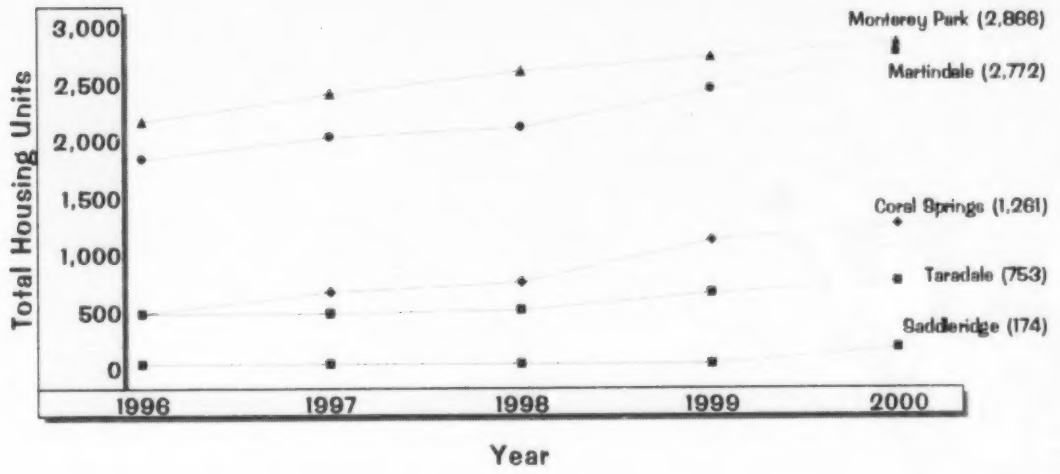
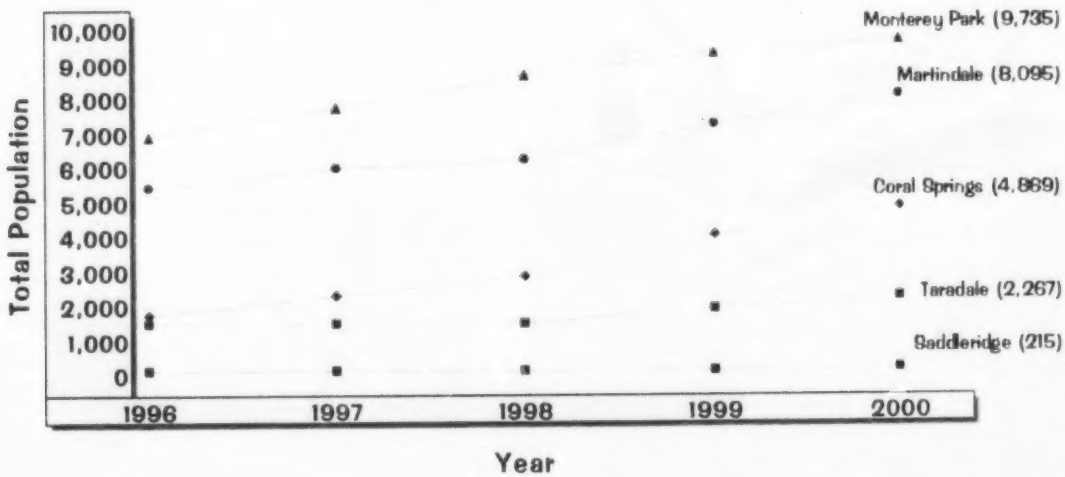
SHORT-TERM GROWTH MANAGEMENT STRATEGY

NORTH SECTOR
MAP 1

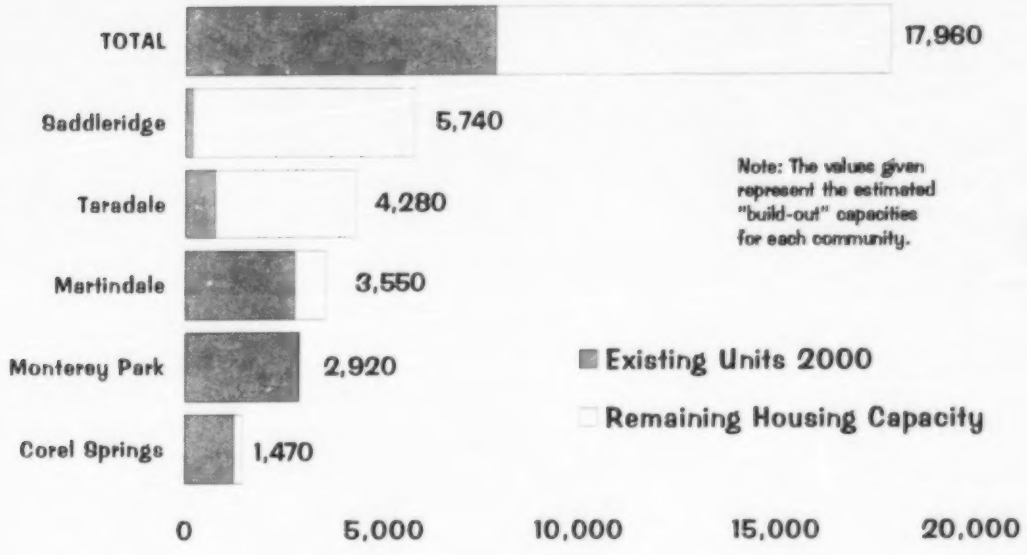
NORTHEAST SECTOR
RECENT GROWTH IN HOUSING



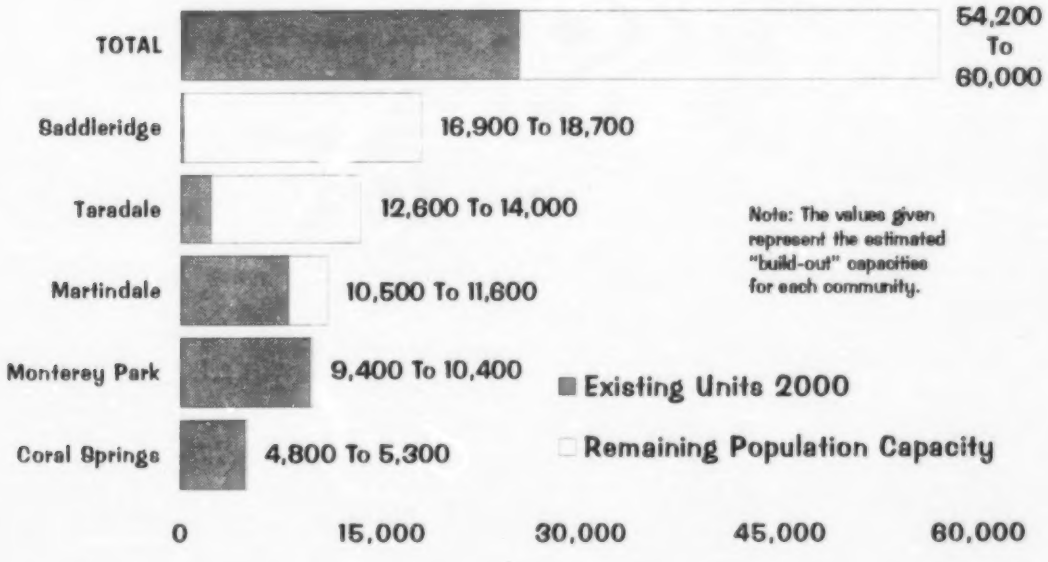
NORTHEAST SECTOR
RECENT GROWTH IN POPULATION



NORTHEAST SECTOR
HOUSING CAPACITY OF DEVELOPING COMMUNITIES



NORTHEAST SECTOR
POPULATION CAPACITY OF DEVELOPING COMMUNITIES



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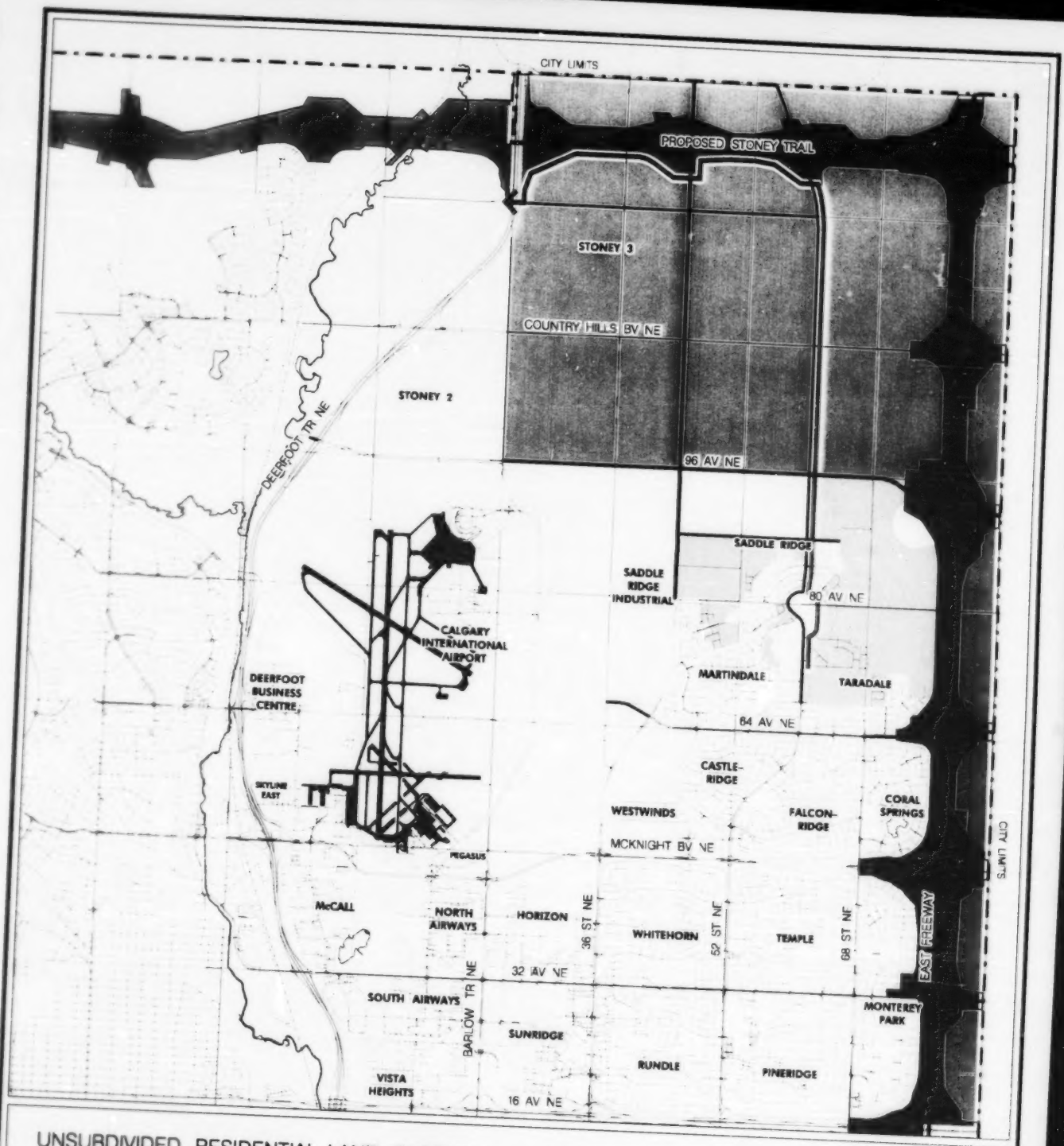

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0 1 Mile
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SHORT-TERM GROWTH MANAGEMENT STRATEGY

NORTHEAST SECTOR MAP 2

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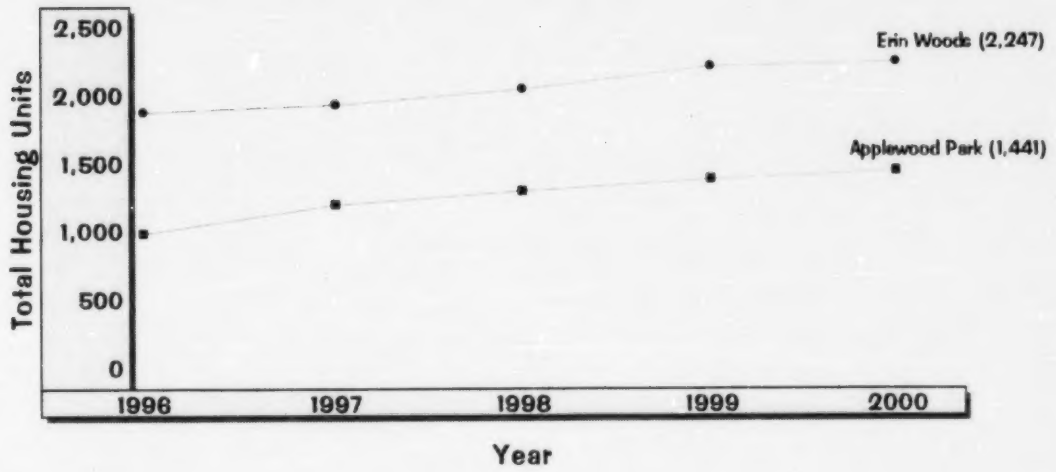
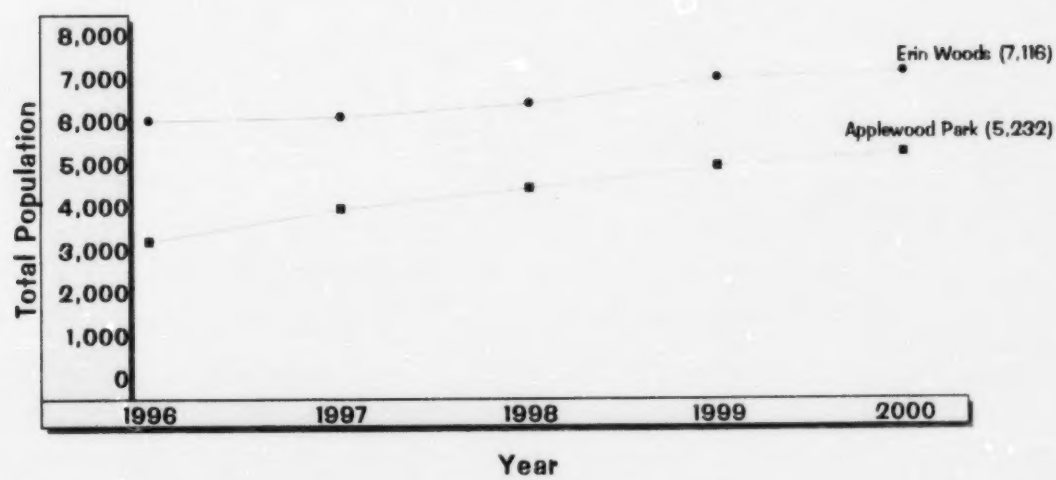
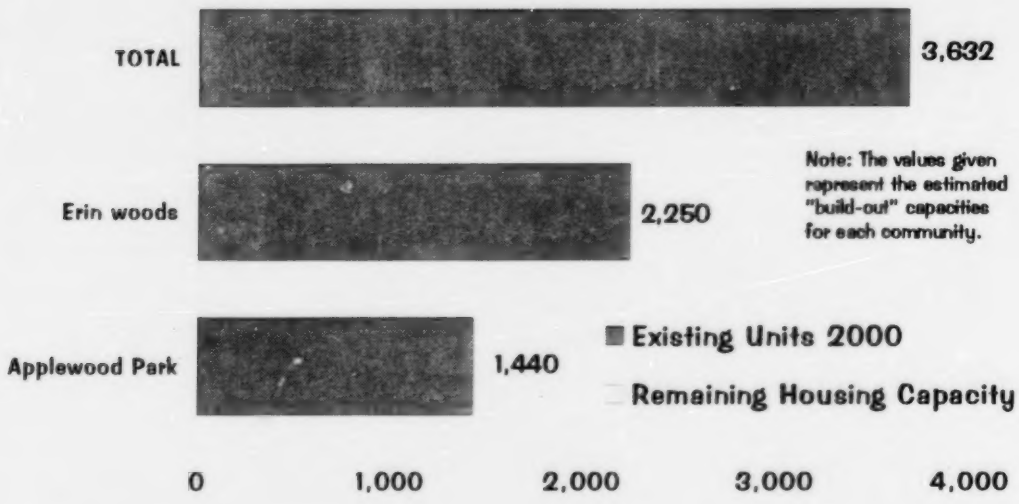
EAST SECTOR
RECENT GROWTH IN HOUSING



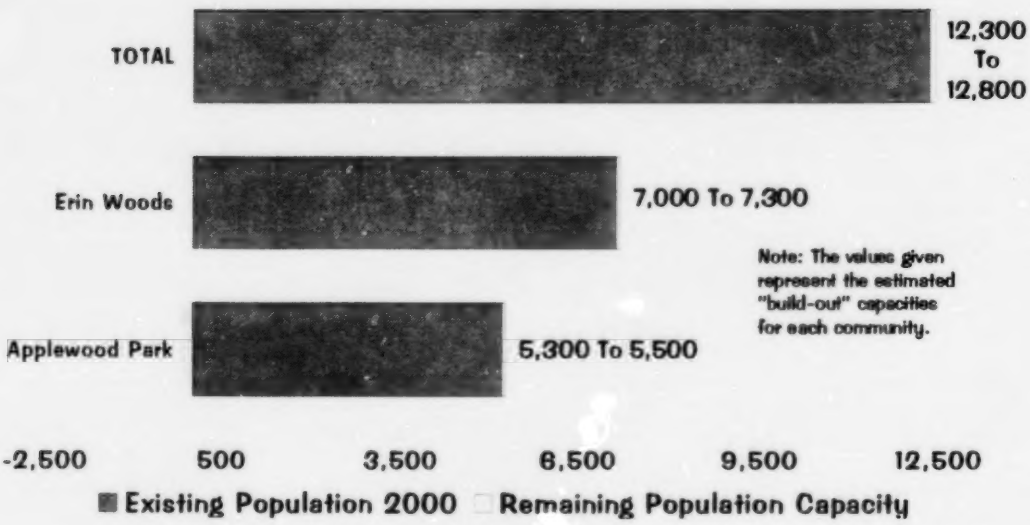
EAST SECTOR
RECENT GROWTH IN POPULATION



EAST SECTOR
HOUSING CAPACITY OF DEVELOPING COMMUNITIES



EAST SECTOR
POPULATION CAPACITY OF DEVELOPING COMMUNITIES



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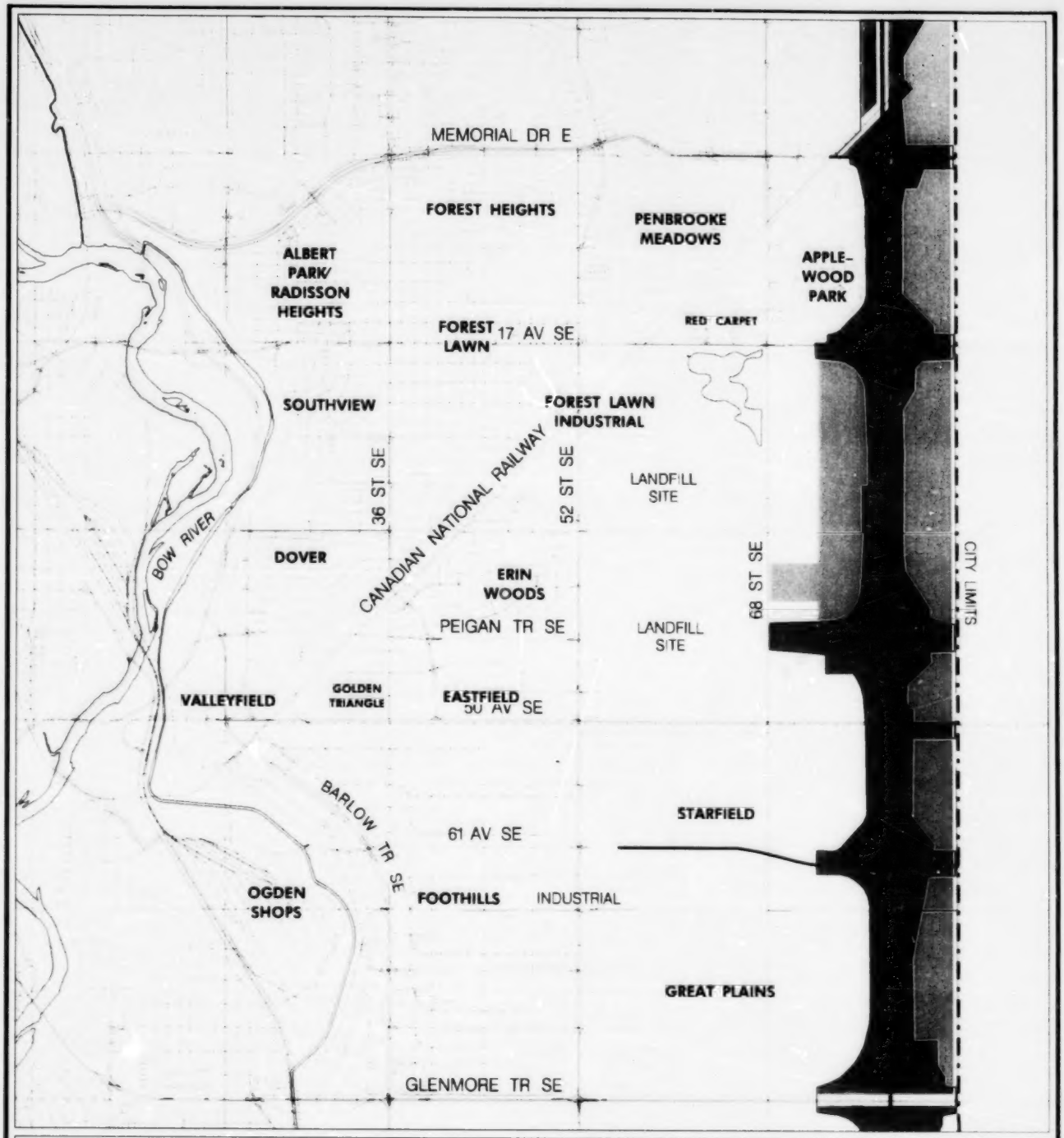

UNSUBDIVIDED RESIDENTIAL LAND SUPPLY (as of April 2000)

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0 1 Mile
0 1.6 Km

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SHORT-TERM GROWTH MANAGEMENT STRATEGY

EAST SECTOR
MAP 3

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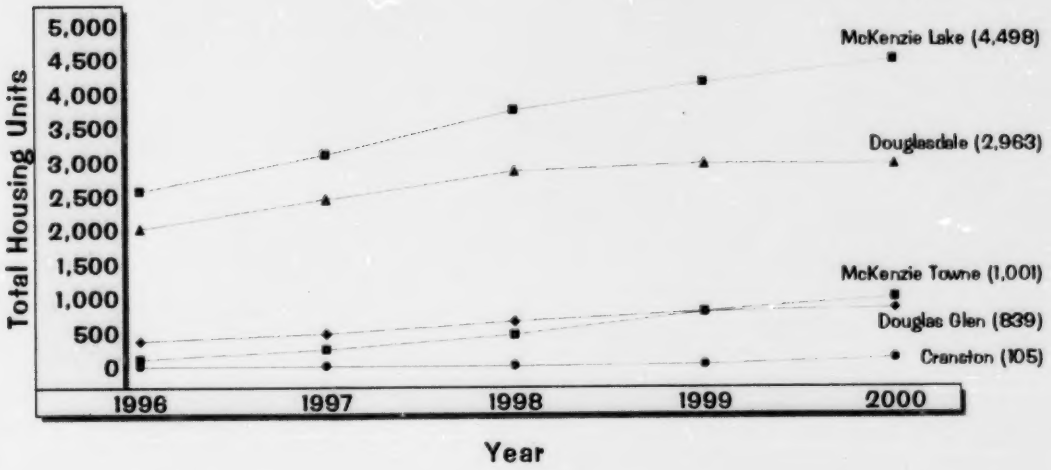
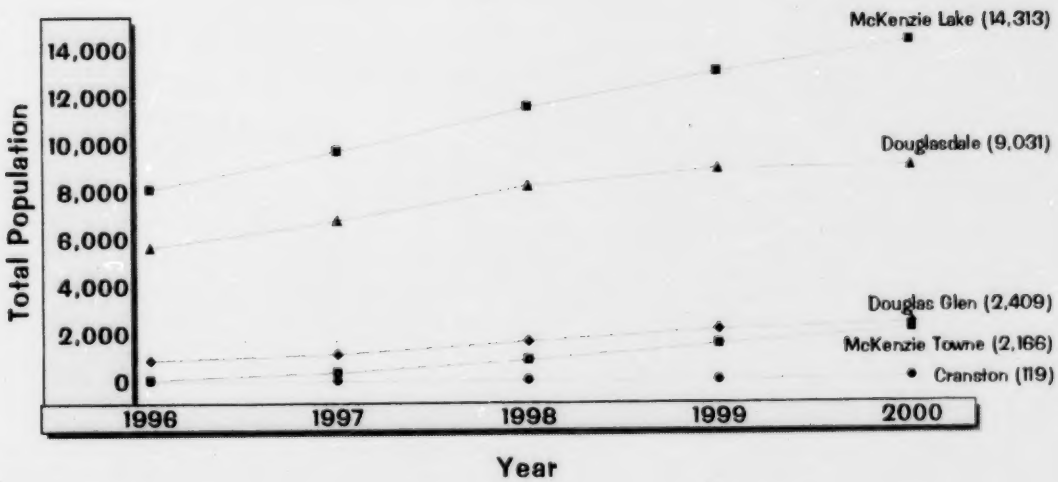
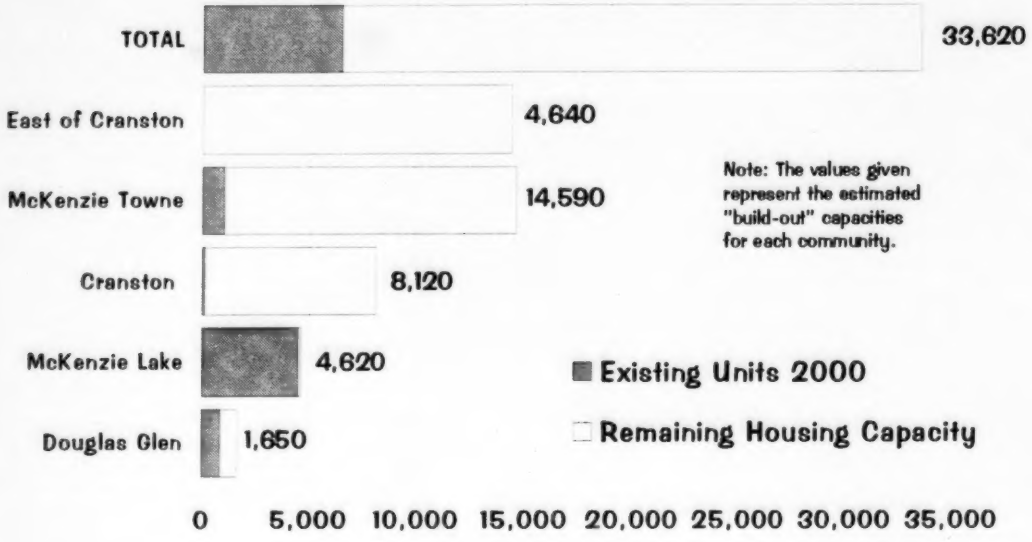
SOUTHEAST SECTOR
RECENT GROWTH IN HOUSING



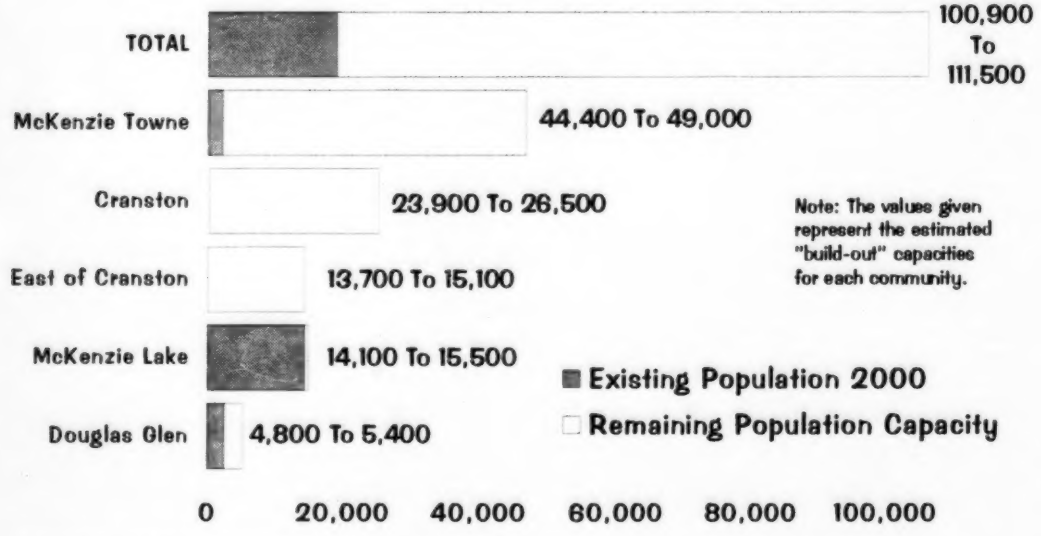
SOUTHEAST SECTOR
RECENT GROWTH IN POPULATION



SOUTHEAST SECTOR
HOUSING CAPACITY OF DEVELOPING COMMUNITIES



SOUTHEAST SECTOR
POPULATION CAPACITY OF DEVELOPING COMMUNITIES



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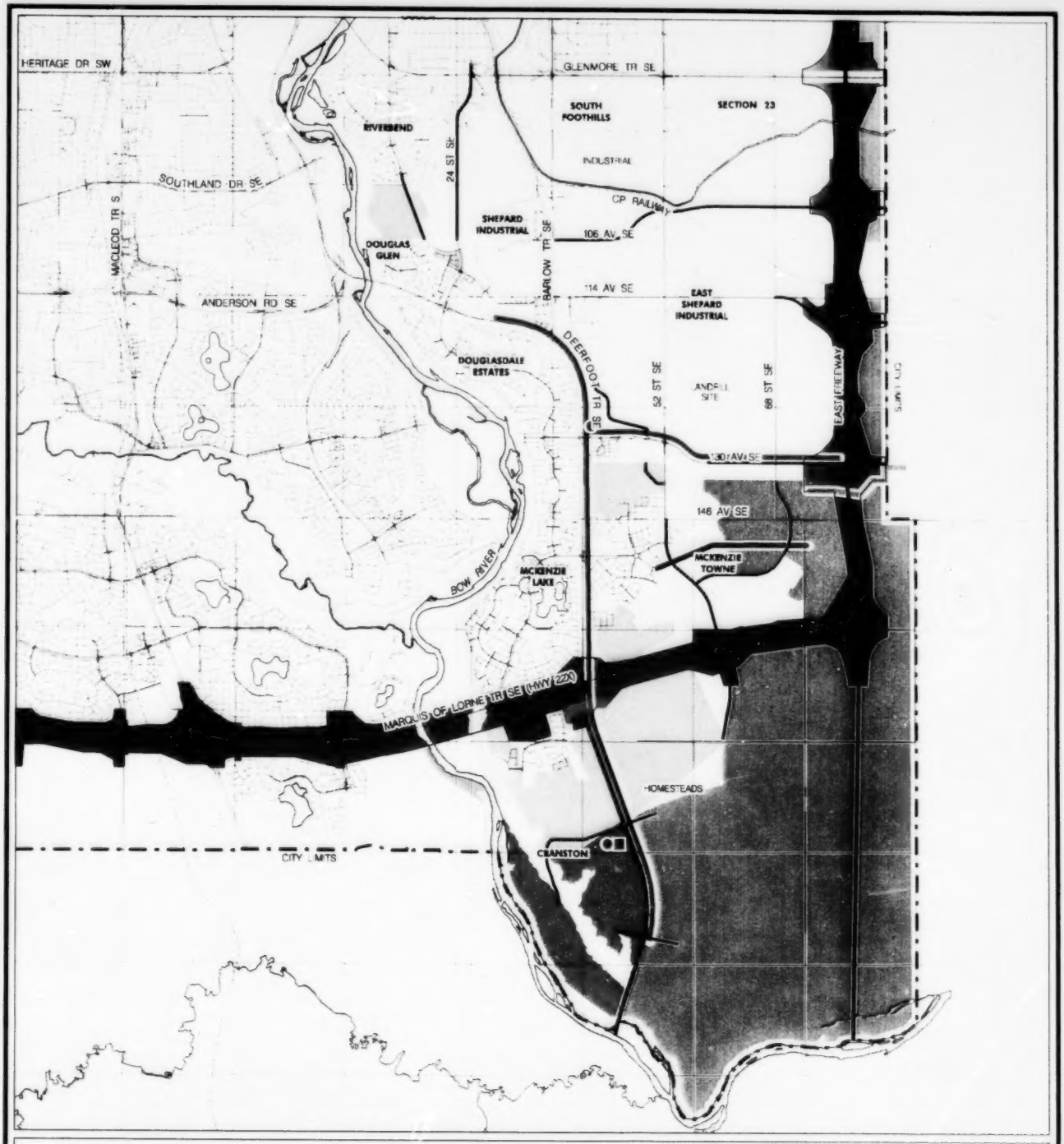

UNSUBDIVIDED RESIDENTIAL LAND SUPPLY (as of April 2000)

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0 1 Mile
0 1.6 Km

- SECTOR BOUNDARY
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SHORT-TERM GROWTH MANAGEMENT STRATEGY

SOUTHEAST SECTOR
MAP 4

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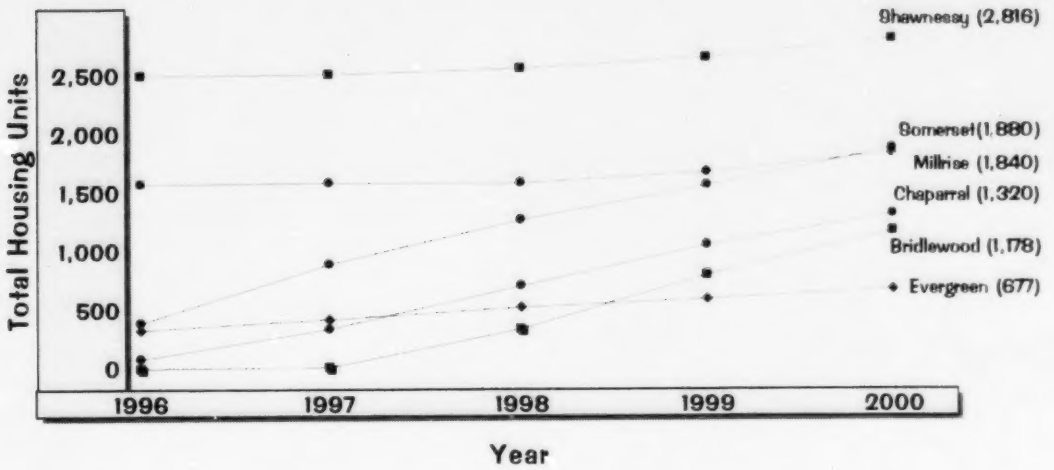
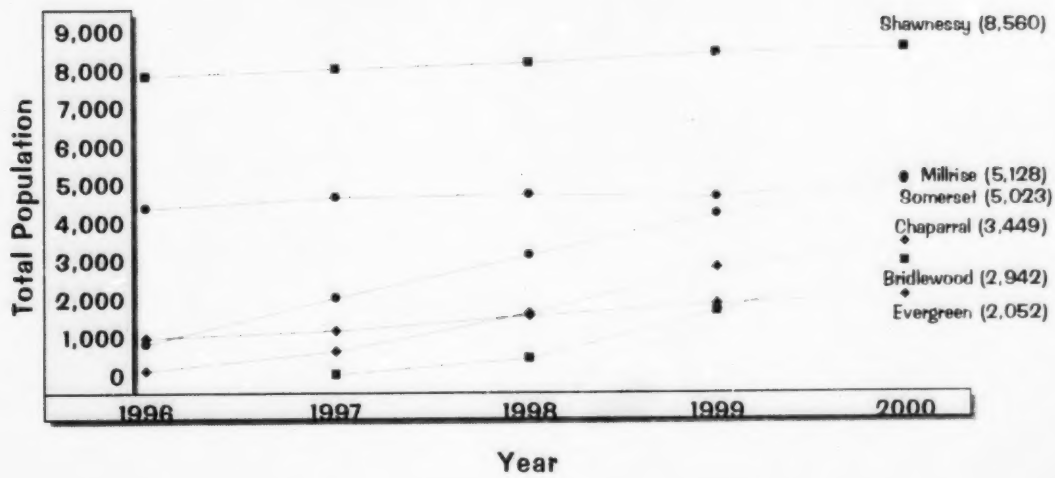
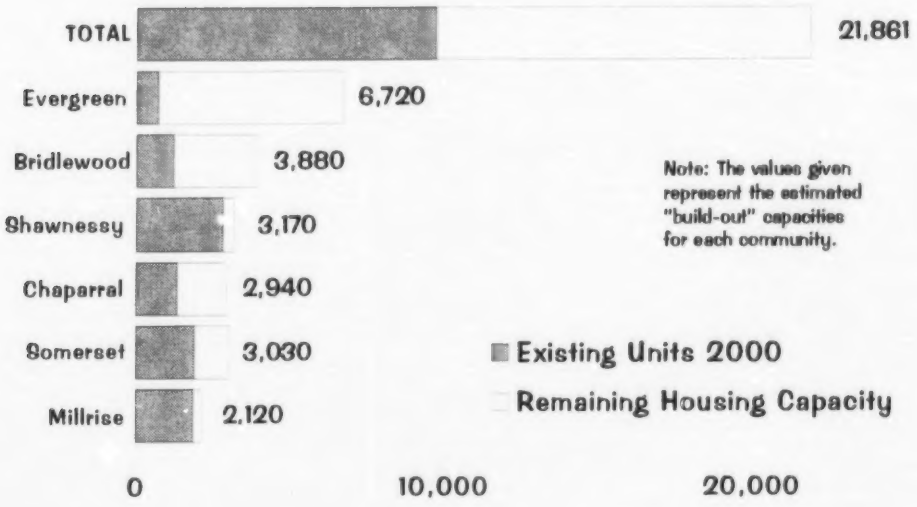
SOUTH SECTOR
RECENT GROWTH IN HOUSING



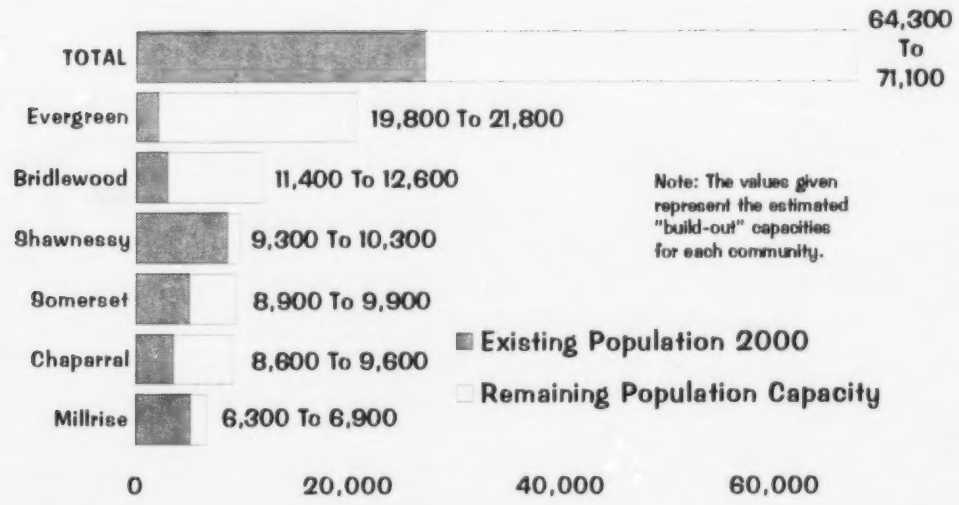
SOUTH SECTOR
RECENT GROWTH IN POPULATION



SOUTH SECTOR
HOUSING CAPACITY OF DEVELOPING COMMUNITIES



SOUTH SECTOR
POPULATION CAPACITY OF DEVELOPING COMMUNITIES



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SHORT-TERM GROWTH MANAGEMENT STRATEGY

SOUTH SECTOR
MAP 5

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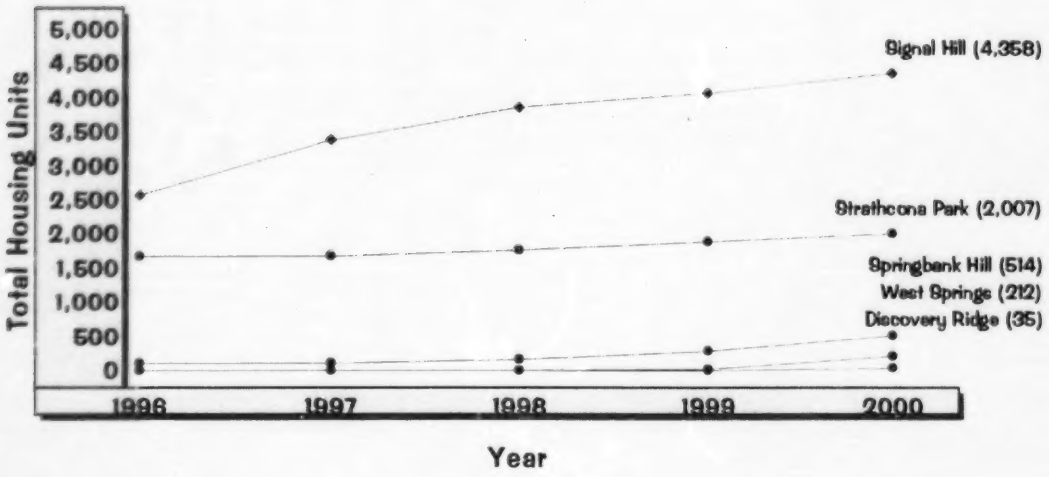
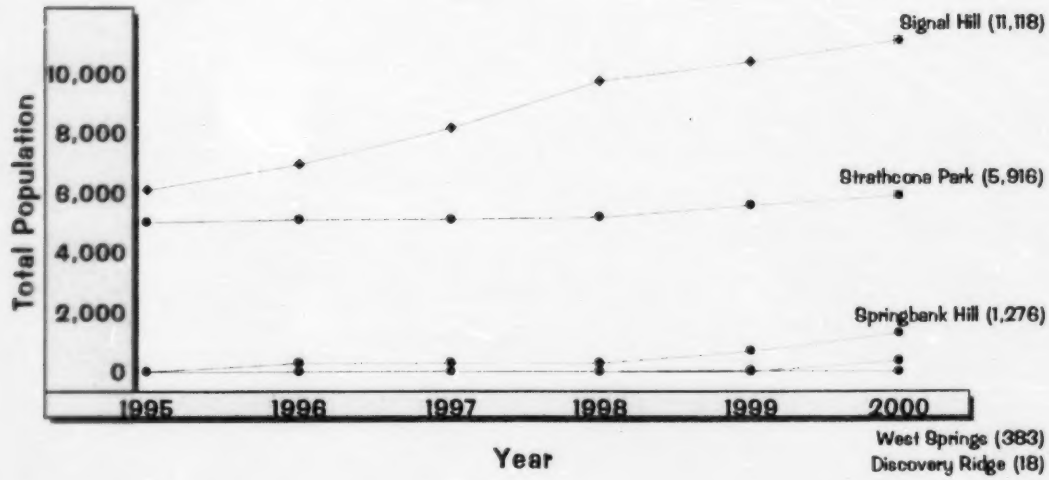
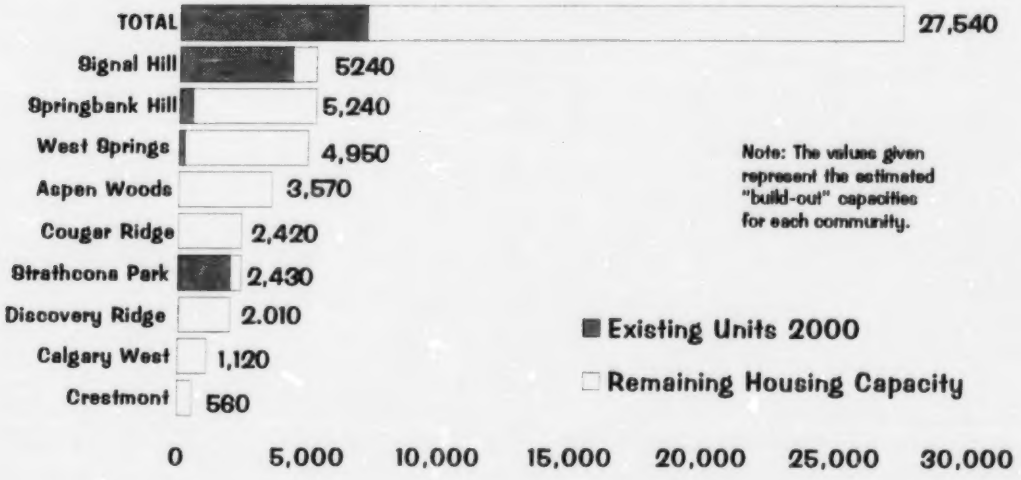
WEST SECTOR
RECENT GROWTH IN HOUSING



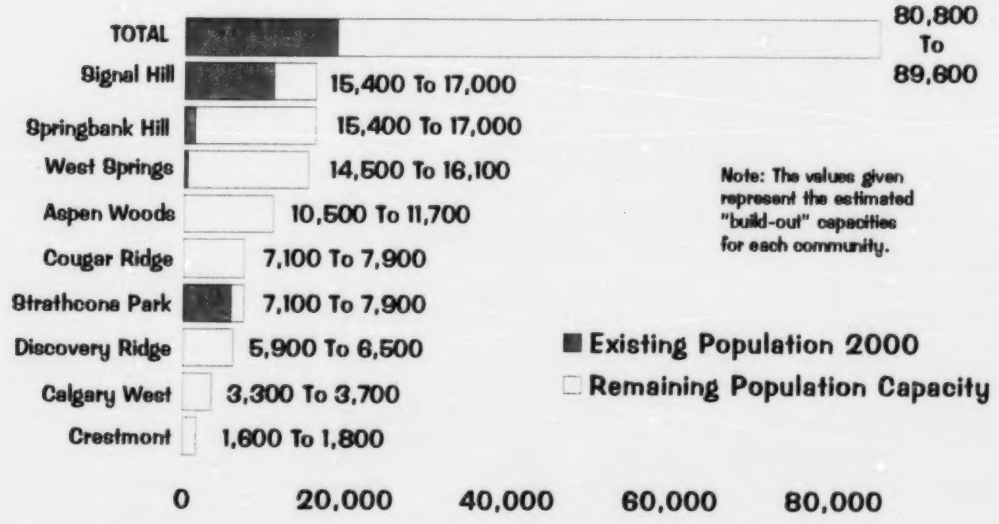
WEST SECTOR
RECENT GROWTH IN POPULATION



WEST SECTOR
HOUSING CAPACITY OF DEVELOPING COMMUNITIES



WEST SECTOR
POPULATION CAPACITY OF DEVELOPING COMMUNITIES



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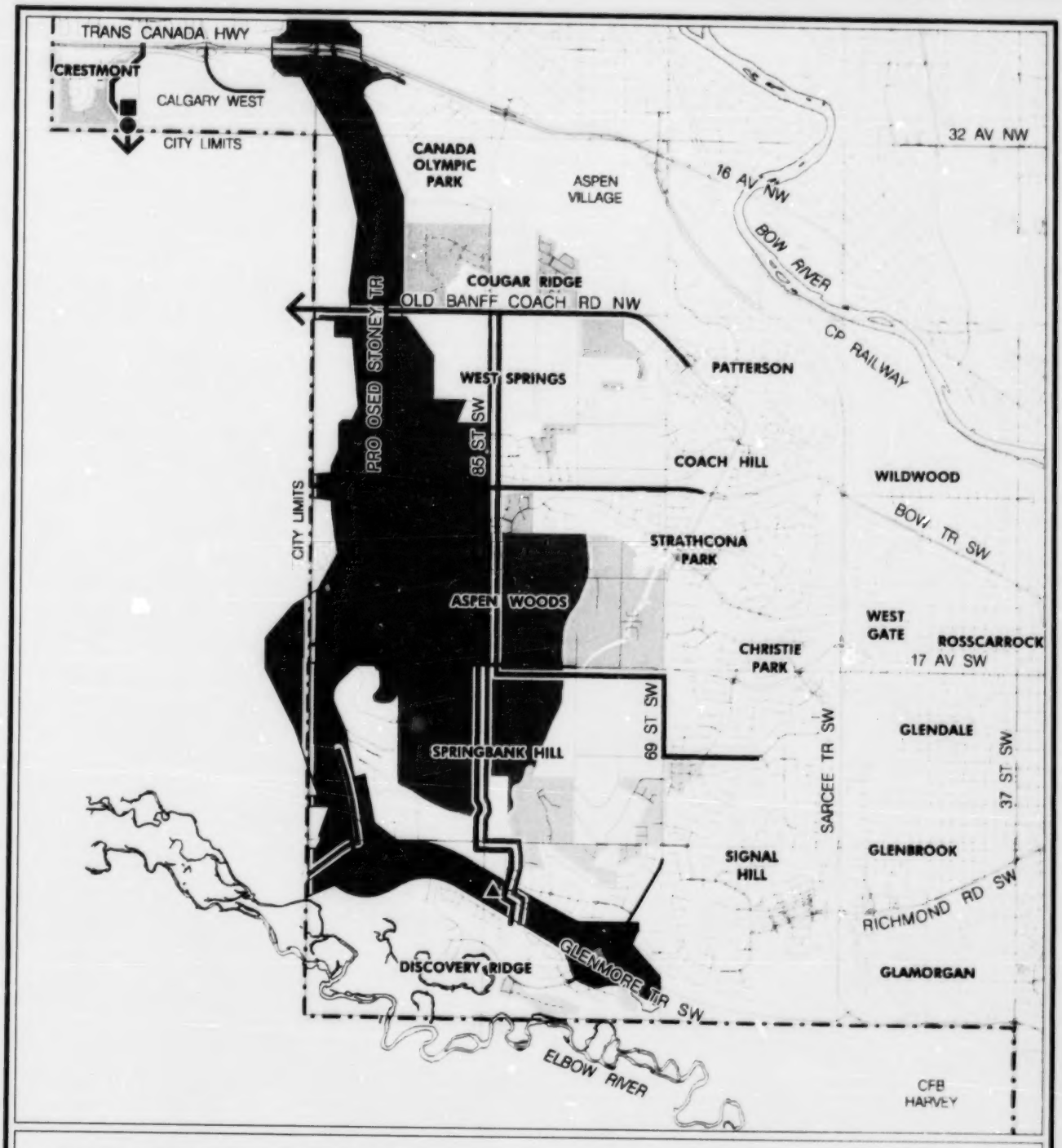

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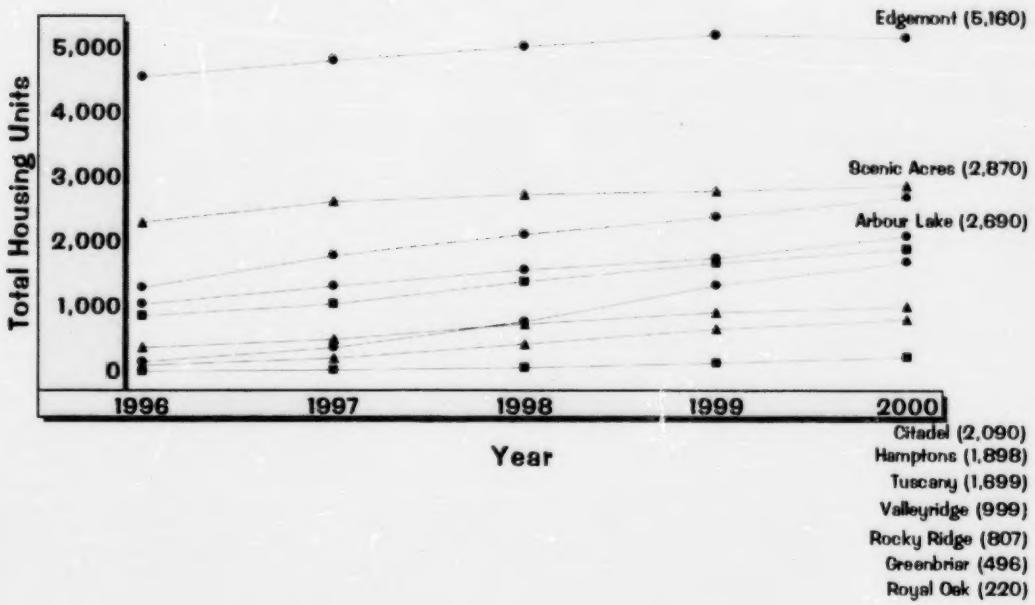
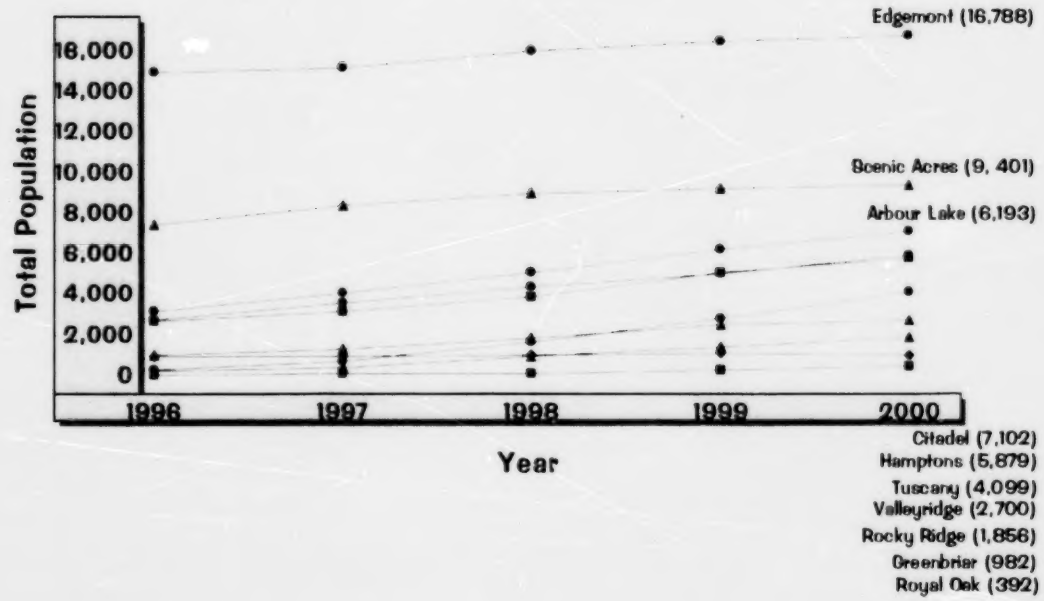
SHORT-TERM GROWTH MANAGEMENT STRATEGY

WEST SECTOR
MAP 6

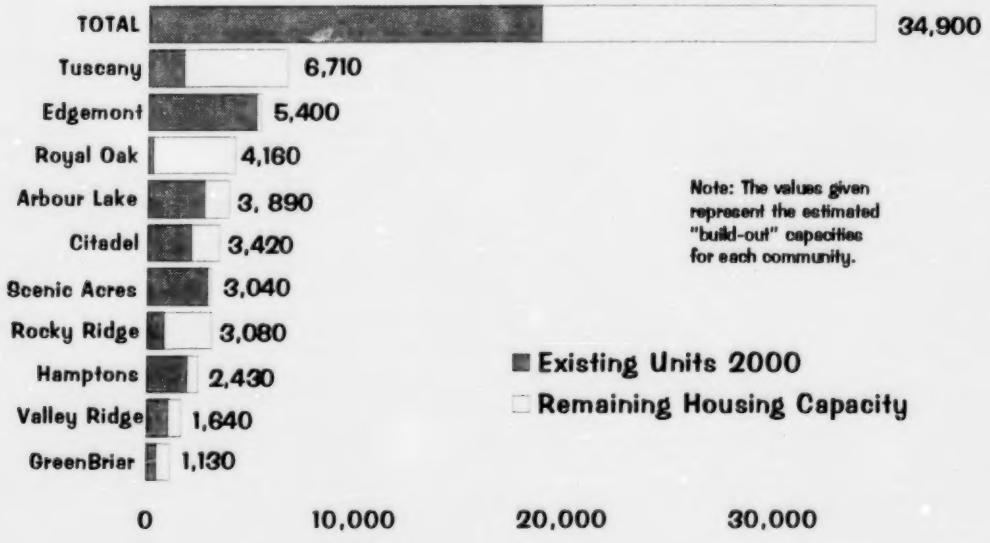
NORTHWEST SECTOR
RECENT GROWTH IN HOUSING



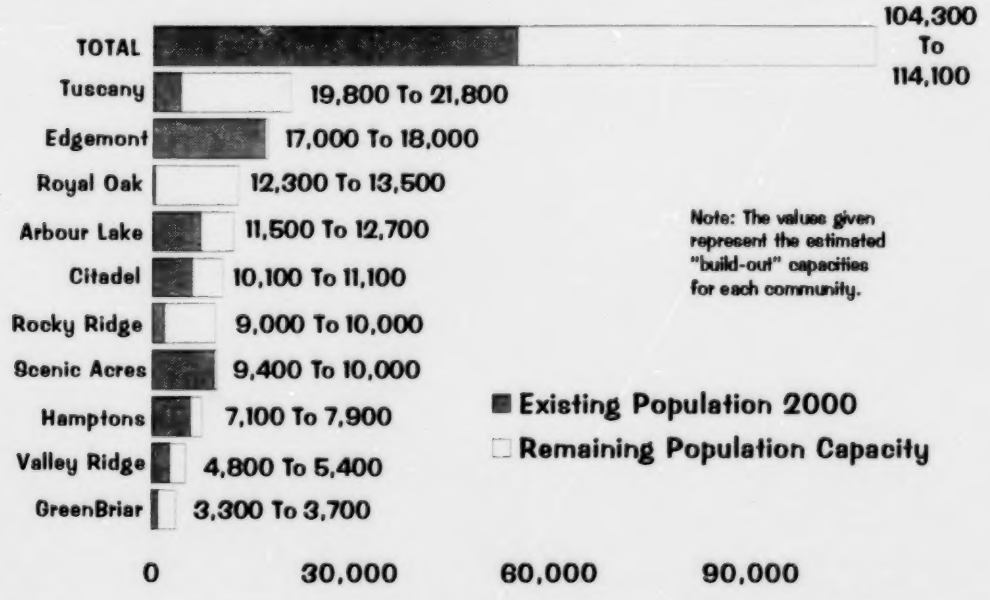
NORTHWEST SECTOR
RECENT GROWTH IN POPULATION



NORTHWEST SECTOR
HOUSING CAPACITY OF DEVELOPING COMMUNITIES



NORTHWEST SECTOR
POPULATION CAPACITY OF DEVELOPING COMMUNITIES



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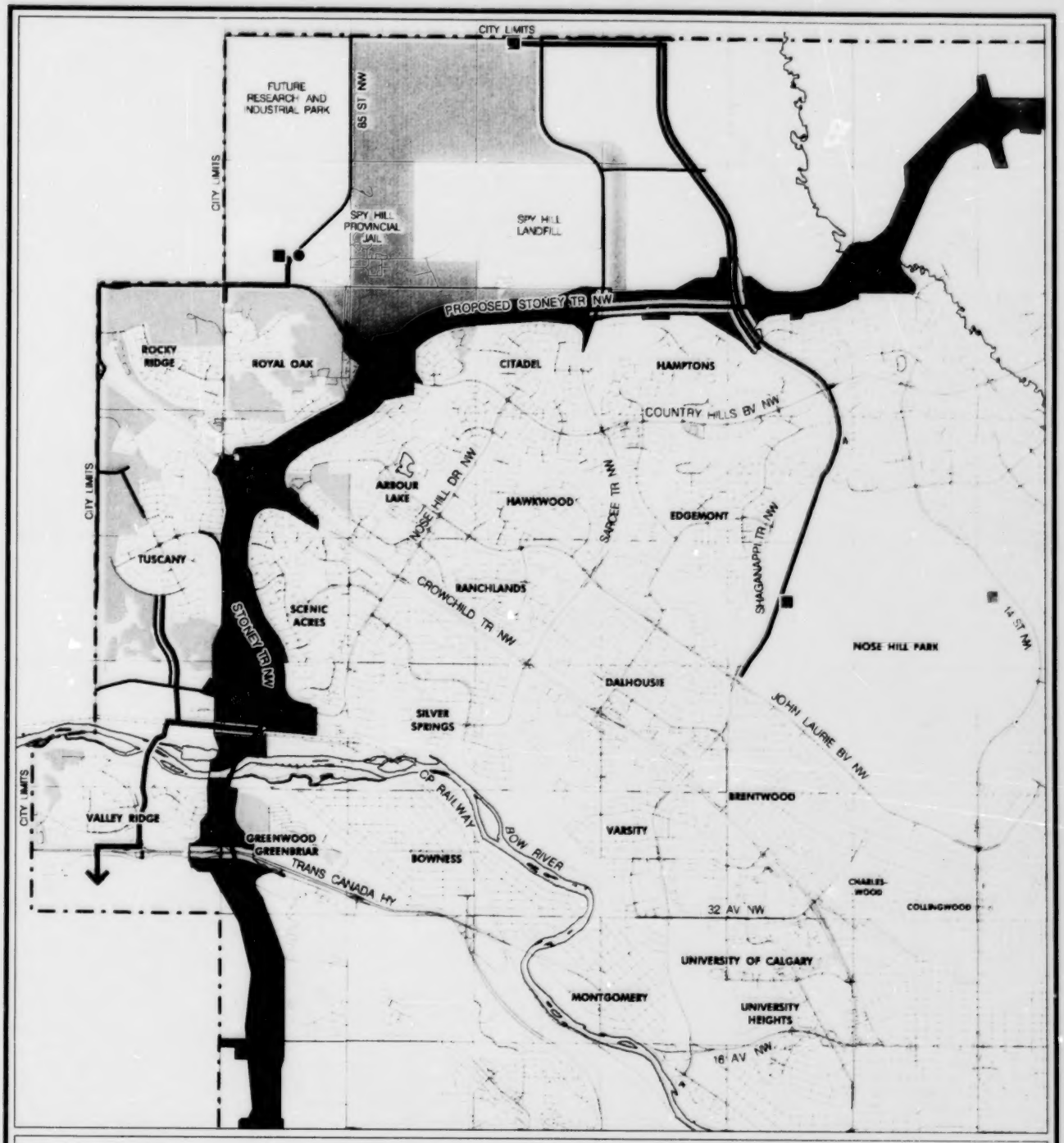

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SHORT-TERM GROWTH MANAGEMENT STRATEGY

NORTHWEST SECTOR
MAP 7

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Appendix III

Development Industry Comments

URBAN DEVELOPMENT INSTITUTE CALGARY CHAPTER
SUITE 770, 999 - 8TH STREET S.W., CALGARY, ALBERTA T2R 1J5
PHONE: (403) 531-6250 FAX: (403) 531-6252 E-MAIL: info@udicalgary.com WEB SITE: www.udicalgary.com

August 22, 2001

Barbara Koch
Land Use & Mobility
Planning & Transportation Policy (#8117)
The City of Calgary
P.O. Box 2100
Postal Station M
Calgary AB T2P 2M5

By fax only to 268-3542.
Subject: *2001 – 2005 Short Term Growth Management Strategy Residential Information Update*

Dear Barb:

Thank you for the copies of the proposed *2001 – 2005 STGMS Residential Information Update* for our review. We accept this document as information only and have no comments. We also have no comments on the revised Table 13 Decker Shields sent us July 20th.

We appreciate your efforts this year to meet with us to discuss Table 13, however, we would like to continue to improve how we work together on this document. For next year's publication, we ask that you please allow UDI three months for proper review before your release date in 2002. In our meetings on this subject, you indicated that the plan is to release this document in February or March each year. In which case, we would hope to see a draft in the preceding December or January.

Sincerely,

Judy Ferguson
Executive Director

Copy: Larry Israelson, Chair, Planning Committee, Fx. 262-2271
Decker Shields, Senior Planning Technician, Planning Policy, Land Use Planning, Fx. 268-3542

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CALGARY REGION HOME BUILDERS ASSOCIATION

September 4, 2001

Barbara Koch
Land Use & Mobility
Planning & Transportation Policy (#8117)
The City of Calgary
P.O. Box 2100
Postal Station M
Calgary, Alberta T2P 2M5

Subject: 2001-2005 Short Term Growth Management Strategy Residential Information Update

Dear Barb:

Thank you for the opportunity to review the 2001-2005 Short Term Growth Management Strategy and the revisions to Table 13.

The CRHBA is pleased to offer its support of this document and appreciate the opportunity to provide input and comments.

Sincerely

Donna K. Moore
Executive Officer

DKM/tm

#100 3016 5th Avenue N.E., Calgary, Alberta T2A 6K4 Telephone (403) 235-1911 Fax (403) 248-1272
Email:chba@telusplanet.net